

OLDFIELD, PATTINSON & CO.

Concentrated Infusions

Fluid Extracts.

Concentrated Decoctions.

Solid Extracts.

Concentrated Liquors.

Fruit Essences.

Concentrated Essences.

Inspissated Juices.

Concentrated Waters.

Soluble Essences.

Concentrated Extracts.

Extract of Herbs.

Coated Pills.

Composition Essence.

Malt Extract.

Vegetable Colours, &c.

DRUGS IN
ORIGINAL PACKAGES
AS IMPORTED.

PERSIAN
BOUQUET
AND
LOZENGES

SPECIAL TERMS
TO
LARGE BUYERS.

Inquiries should state quantities.

Cucumber
AND
Glycerine Cream
IN
BULK & BOTTLED.

PRICE LIST WILL BE FORWARDED ON RECEIPT OF BUSINESS CARD.

MANUFACTURING CHEMISTS, WHOLESALE AND EXPORT DRUGGISTS, IMPORTERS of ESSENTIAL, OLIVE, and COD LIVER OILS.

SOLE PROPRIETORS AND MANUFACTURERS OF THE

"SILVER CHURN" DAIRY PREPARATIONS.

Butter Colouring.

GLASS BOTTLES.. 6d., 1/. 2/. 5/ Retail.
4/, 8/, 16/, 38/ per dozen.
BULK 1/ per lb. 100/ cwt. in 2-gallon Bottles.
90/ in 1-cwt. Kegs. 85/ in 3-cwt. Barrels.

Butter Powder
and Preserver.

BOXES 6d., 1/. 2/. 5/ Retail.
4/, 8/, 16/, 38/ per dozen.
BULK 1/ per lb. 84/ cwt. in 3-cwt. Kegs.

Essence of Rennet,
For Junkets, Curds and Whey,
Cheese Cakes, &c., &c.

GLASS BOTTLES.. 6d., 1/. 2/. 5/ Retail.
4/, 8/, 16/, 38/ per dozen.
BULK 1/ per lb. 10d. in 2-gallon Bottles.

Liquid Annatto,
or Cheese Colouring.

STONE BOTTLES. 6d., 1/. 2/. 5/ Retail.
4/, 8/, 16/, 38/ per dozen.
BULK 1/ per lb. 10d. in 2-gallon Bottles.
84/ in 12-gallons. 80/ in 3-cwt. casks.

Cheese Rennet,
OF
SPECIAL STRENGTH.

STONE BOTTLES.. 1-pints, 9d. Retail. 6/ doz.
Pints, 1/3 " 10/ "
Quarts, 2/ " 18/ "
1/2 gall., 4/ " 34/ "
1-gall., 8/ " 68/ "
BULK. At Special Prices. Inquiries should state quantity.

These Goods are selling well in the Agricultural districts. They are very attractively got up, are superior to any foreign makes, and are well worth the attention of the Trade, as they leave a good margin to the seller.

Attractive Show Cards and Printed Matter may be had on application.

17 TODD STREET, MANCHESTER.

PLASTERS.

56 HANOVER STREET, LIVERPOOL.

In view of the approaching season for Plasters, we call attention to our very complete assortment, the prices for which we have revised, and quotations will be found lower than most houses; and we direct particular attention to our **Belladonna** in all forms, being made entirely from Alcoholic Extract of our own manufacture, without any artificial or deleterious colouring matter.

October 1, 1890.

EVANS, SONS & CO

PLASTERS—MARGINAL.

On Leather	Retail Price	Bal- samie	Cale- faciens	Robo- rans	COD LIVER OIL	No.	Retail Price	Belladonna, Capsicum, or Opium	
		Per Doz. s. d.	Per Doz. s. d.	Per Doz. s. d.	Per Doz. s. d.			Per Doz. s. d.	
Heart Shape	1d.	0 7	0 7	0 7	0 7	—	—	—	
" "	1½d.	0 11	0 11	0 11	0 11	2	3d.	1 10	
" "	2d.	1 3	1 3	1 3	1 3	3	4d.	2 10	
" "	3d.	1 10	1 10	1 10	1 10	4	6d.	3 9	
" "	4d.	2 6	2 6	2 6	2 6	—	—	—	
" "	6d.	3 9	3 9	3 9	3 9	6	8d.	5 8	
Long Shape	1d.	0 7	0 7	0 7	0 7	—	—	—	
" "	2d.	1 3	1 3	1 3	1 3	2	3d.	1 10	
" "	3d.	1 10	1 10	1 10	1 10	3	4d.	2 10	
" "	4d.	2 6	2 6	2 6	2 6	4	6d.	3 9	
" "	6d.	3 9	3 9	3 9	3 9	6	8d.	5 8	
" "	8d.	5 8	5 8	5 8	5 8	8	1/-	7 6	
Oval Shape	2d.	1 3	1 3	1 3	—	—	—	—	
" "	3d.	1 10	1 10	1 10	—	2	3d.	1 10	
" "	4d.	2 6	2 6	2 6	—	3	4d.	2 10	
" "	6d.	3 9	3 9	3 9	—	4	6d.	3 9	
" "	8d.	5 8	5 8	5 8	—	—	—	—	
" "	—	—	—	—	—	6	8d.	5 8	
" "	—	—	—	—	—	8	1/-	7 6	
Saddle Shape	6d.	3 9	3 9	3 9	—	—	8d.	5 8	
" "	8d.	5 8	5 8	5 8	—	—	1/-	7 6	
Breast Shape	4d.	Emp.		2 6	—	—	6d.	Bella-	
" "	6d.	Plumbi		3 9	—	—	8d.	donna or	
								Opium } 3 9	
									5 8

THROAT PLASTERS, 1d.; Balsamic, 7d. dozen.

" " 2d.; Belladonna, 1/3 dozen.

NOTE.—We can also supply **BELLADONNA PLASTER** spread to order in the following sizes, exclusive of margin,
2×3, 3×4, 3½×3½, 6×6, 7½×7½, 8×4 inches

1/6 2/- 2/- 4/- 6/- 4/- per dozen.

These sizes are frequently required in dispensing.

PLASTERS—WITH ADHESIVE MARGIN, ON LEATHER.

LONG OR HEART SHAPE, BELLADONNA, CAPSICUM, OR OPIUM.

Size—No. 3 4 6 8
4/- 6/- 8/- 12/- dozen.

LONG OR HEART SHAPE, ROBORANS, OR STRENGTHENING.

Size—No. 3 4 6 8
2/8 4/- 6/- 8/- dozen.

PLASTERS—

BREAST SHAPE, ON SWANSDOWN.

No. 4 6

BELLADONNA ... 2/8 4/- per dozen

PLUMBI ... 1/4 2/- "

TO BUYERS OF QUANTITY WE GIVE SPECIAL DISCOUNTS.

PLASTERS—

POROUS, MARGINAL, ON LEATHER, SAVARS.

These Plasters are spread on Leather specially prepared and perforated, and are ventilating, more pliable, adhere more closely, and in every way superior to the ordinary marginal plasters. They are protected with Muslin on the back. We can supply them with plain backs if required.

On Leather	No.	Retail Price	Balsamic, Calefaciens, Roborans, or Strengthening	Retail Price	Belladonna, Capsicum, or Opium
			Per Doz. s. d.		Per Doz. s. d.
Heart Shape	1	1½d.	0 11	—	—
" "	2	3d.	1 10	4d.	2 6
" "	3	4d.	2 6	6d.	3 9
" "	4	6d.	3 9	8d.	5 8
" "	6	8d.	5 8	1/-	7 6
Long Shape	1	1½d.	0 11	—	—
" "	2	3d.	1 10	4d.	2 6
" "	3	4d.	2 6	6d.	3 9
" "	4	6d.	3 9	8d.	5 8
" "	6	8d.	5 8	1/-	7 6
" "	8	1/-	7 6	1/6	11 0
Saddle Shape	—	8d.	Roborans or 5 8	—	—
" "	—	1/-	Strengthening 7 6	—	—
Breast Shape	—	8d.	5 8 Emp.	—	—
Belladonna ..	—	1/-	7 6 Plumbi }	8d.	5 8

PLASTERS—POROUS, MARGINAL, ON CHAMOIS LEATHER.

BELLADONNA.

Sizes—6×4 7×5 8×6 10×5 12×6 inches.

Price... 3/6 5/6 7/6 9/6 12/- dozen.

We can also supply Opium, or Belladonna and Opium combined, which we spread to order.

PLASTERS, TONIC—ON SWANSDOWN.

HEART SHAPE Nos. 1 2 3 4 5

5/8 8/- 11/- 16/8 — gross.

LONG SHAPE ... 7/3 11/- 13/9 16/8 21/6 "

SADDLE SHAPE... ... 28/6 gross.

PLASTERS—POOR MAN'S

No. 1. On Cloth, **Savars** 15/3 per gross.

" 1a. On Paper " 6/8 per gross.

" 2. Porous " 3d. retail (in boxes, containing 2 dozen), 2/- per dozen.

" 2a. " on Paper, **Savars**, 2d. retail (in boxes containing 2 dozen), 15/- per gross.

PLASTERS—RIBBON (Adhesive).

No. 1. Boxes of Eight assorted Ribbons (for Surgeons' use), 6/- per box.

No. 2. FOSSILINE, in boxes, 2 in. wide, 6 yards long, **Savars**, retail 9d., 6/- per dozen boxes.

EVANS, SONS & CO., LIVERPOOL.

LONDON:

EVANS, LESCHER & WEBB,
60 Bartholomew Close.

CANADA:

EVANS AND SONS, LIMITED,
Montreal & Toronto, & Victoria, Columbia.

PLASTERS.

(Continued.)

PLASTERS—SPREAD.

Material	Fine Shirting	Soft unglazed Calico	Twill Calico	Moleskin	Swansdown	Pure Calico	Pink Elastic
No.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
1. Emp. Adhesiv. Opt. Doz. Yds.	5 0	5 0	9 0	18 0	10 0	6 6	16 0
2 " " Sec.	4/- & 3/6	—	—	—	—	—	—
3 " Ammon. c. Hydr. "	16 0	—	25 0	30 0	20 0	—	—
4 " Belladonna "	16 0	18 0	20 0	6 30	0 20	0 20	0 —
5 " Calefaciens.	8 6	10 0	15 0	25 0	13 0	—	—
6 " Capsici.	12 0	13 0	—	—	20 0	—	—
7 " Ceratum Saponis "	7 6	9 0	15 0	20 0	14 0	10 6	—
7a " Cerat. Saponis emul. 10% Acid Salicylic 7½ in. wide, 3/ yd	—	—	—	—	—	—	—
8 Emp. Opii. doz. yds.	16 0	—	25 0	33 0	24 0	—	—
9 " Plumbi.	5 6	7 0	10 0	21 0	13 0	—	—
10 " Roborans.	5 0	6 6	10 0	22 0	13 0	—	—
11 " Saponis Alb.	5 0	6 6	12 0	21 0	13 0	—	—
12 " Dreadnought, for Hospitals.	—	9 0	—	—	—	—	—
13 " Adhesive on Holland. 7/6 per dozen yards.	—	—	—	—	—	—	—
13a " Acid Salicylic, 38%, 3/6 yard, 7½ inches wide.	—	—	—	—	—	—	—
13b " " " 38% with Creosote, 3/6 yard, 7½ inches wide.	—	—	—	—	—	—	—
13c " " " 20% " " 2/9 " 7½ " "	—	—	—	—	—	—	—
13d " " " 20% with Creosote, 2/9 " 7½ " "	—	—	—	—	—	—	—

13a to 13d, for Epidermis thickened by disease, see *British Medical Journal*, 1884, page 602.

Material	Soft Unglazed Calico	Flesh-colrd. Holland	Pure Cambric	Pure Calico
14 Emp. FOSSILINE—Savars	8/-	10/-	10/-	7/6 doz. yds.
14a " Surgeon's Adhesive Plaster, Flesh-colour, on fine Cambric, in tins, ½ yard, 3/6; yards, 6/ per dozen.	—	—	—	—
14b " Family Adhesive Plaster, in tins, containing ½ yard on Flesh-coloured Cambric, 3/6 doz.	—	—	—	—
14c " Hemostatic Antiseptic and Styptic, on pliable pure cloth, in 1-yard tins, 9d. per yard.	—	—	—	—
14d " Hemostatic Antiseptic and Styptic, on pliable pure cloth, in 3-yard tins, 8d. per yard.	—	—	—	—
14e Pepp's Antiseptic Adhesive, in 6-yard rolls, 8 inches wide, on Brown Holland, 3/9 dozen yards.	—	—	—	—

We keep stock of the above.

Every other description of Plaster for Surgeons can be spread to order on any material.

PLASTERS—FELT (POROUS).

We have much pleasure in informing our friends we have been successful in spreading Plasters on FELT, combining Plaster and Chest Protector in one. They are warm, and being Porous are ventilating, thereby ensuring comfort to the wearer. The following are sizes and prices:—

HEART OR LONG SHAPE, BELLADONNA OR CAPSICUM—

Size—No.	2	3	4	6
Price—	2/6	3/9	5/8	7/6 doz.

Per dozen yards, 7½ inches wide, 24/-.

HEART SHAPE OR LONG SHAPE, ROBORANS OR STRENGTHENING.

Size—No.	2	3	4	6
Price—	1/10	2/6	3/9	5/8

Per dozen yards, 7½ inches wide, 18/-.

BREAST SHAPE—EMP. BELLADONNA OR PLUMBI.

8d.	1/-
5/8	7/6 dozen.

PLASTERS—PINE EXTRACT.

POROUS, on Cloth, 7½ by 5 inches, each in a Wrapper, in 2 dozen boxes 2/ per dozen.

TO BUYERS OF QUANTITY WE GIVE SPECIAL DISCOUNTS.

PLASTERS—WATERPROOF SHEETING.

These Plasters are spread on Waterproof Sheeting, are Porous, and will be found not only comfortable to wear, but will adhere even in the bath. They are put up as follows:—
STRENGTHENING, in ornamental boxes of 2 dozen, or plain boxes of 1 dozen, 2/6 per dozen.

BELLADONNA, in ornamental boxes of 2 dozen, or plain boxes of 1 dozen, 3/6 per dozen.

In one yard rolls, Belladonna, 2/3 per yard.

" " Strengthening, 1/6 per yard.

PLASTERS—

SAVARS

"Good Samaritan"

POROUS PLASTERS

Size—7½ × 5 in.

CAPSICUM (in boxes of 12 and 36 Plasters) 30/ per gross.

BELLADONNA (in boxes of 12 and 36 Plasters) 30/ per gross.

STRENGTHENING (in boxes of 12 and 36 Plasters) 30/ per gross.



PLASTERS—INDIARUBBER POROUS.

We have great pleasure in informing our friends that we have been successful in manufacturing and spreading Plasters in Indiarubber combination. The quality is guaranteed, and in appearance they are quite equal to anything offering at present on the market; and we feel sure from the popularity that Indiarubber Plasters have attained, and the reasonable price at which we offer them, our friends will be enabled to effect good sales. They are put up in fancy boxes, containing two dozen, and each Plaster is put in a separate envelope, which is not closed at one end, so that at pleasure the Plaster can either be sent out with simply the muslin facings on it (no name being on the Plaster itself) or with the printed envelope. The size of the Plaster is 7½ by 5 inches.

PRICES.

ANTISEPTIC RUBBER ADHESIVE PLASTER, which will adhere in any temperature with the warmth of the body. On spools, containing 10 yards each, in the following widths:

Spread on strong Cotton Cloth—

1/2	1	1 1/2	2	3	inches wide.
9/	12/	15/	18/	22/6	27/ 37/6 doz. spools.

We can also spread on any material to order—

ADHESIVE, in 1-yard rolls, 9/ per doz.; STRENGTHENING, 2/ per doz.; BELLADONNA OR CAPSICUM, 3/6 per doz.

SPECIAL NOTICE.—Any Customer requiring his Name and Address on Plaster can have this done on wrapper and linen of each, free of charge, on purchasing not less than One Gross, which can be assorted.

In one-yard rolls, Belladonna or Capsicum, 2/ per yard, 6-yard tins, 11/ tin
Strengthening 1/6 8/

CANTHAR OR BLISTERING CLOTH, in yard tins, 7½ in. wide, 24/ doz. yards.

BELLADONNA, Rouud, for Breasts, No. 4, 6½ in. diameter, 3/6 per dozen.

" " " " 6, 7½ " " 6/ "

BELLADONNA on Kid (Porous), in following widths, each 24 inches long, put up in a suitably labelled box:—

4	5	6	7	8	inches wide.
1/4	1/8	2/	2/3	2/6	per piece, 24 inches long.

PLASTERS—POROUS MARGINAL, LEATHER, with Rubber Combination.

BELLADONNA—No. 3, 4/; No. 4, 6/; No. 6, 8/ dozen.

N.B.—We can also supply other sizes and any description of Plaster to order.

EVANS, SONS & CO., LIVERPOOL.

LONDON:

EVANS, LESCHER & WEBB,
60 Bartholomew Close.

CANADA:

EVANS AND SONS, LIMITED,
Montreal & Toronto, & Victoria, Columbia.

PLASTER S.—(Continued.)

PLASTERS, MUSTARD.

- No.
- | | | | |
|---|-----|-------|------------------------|
| 1. HAWLEY'S, Loose ... | ... | ... | 45/- per 1,000 leaves. |
| 2. „ in Penny Packages ... | ... | ... | 9/- gross |
| 3. FAMILY, MUSTARD, in Tins containing $\frac{1}{2}$ yard | 4/3 | dozen | |
| 4. In Sixpenny Tins, containing 3 leaves... | ... | 3/ | „ |
| 5. FAMILY, in tins containing 1 yard | ... | 7/6 | „ |

N.B.—All the above will answer as a substitute for Charta Sinapis, B. Ph., 1885.

PLASTERS—POROUS—ON LINEN.

BALSAMIC POROUS PLASTERS, in boxes of 2 dozen
(HAWLEY'S), 2/- per dozen.
BELLADONNA POROUS PLASTERS, in boxes of 2 dozen
(HAWLEY'S), 2/- per dozen.
"CHILLIE PASTE" POROUS PLASTERS, boxes of 2 dozen
(HAWLEY'S), 2/- per dozen.
STRENGTHENING POROUS PLASTERS, boxes of 2 dozen
(HAWLEY'S), 2/- per dozen.

PLASTERS—RINGWORM.

In 6d. Cases 4/6 per dozen.



TRADE MARK

CHEST PROTECTORS



TRADE MARK

SINGLE, DOUBLE, AND VEST SHAPE.

[illegible]

Fig. 1.



Fig. 2.



Fig. 3.

The SIZES of Savars SINGLE PROTECTORS are—

THE SIZES OF SAVARY'S SINGLE PROTECTORS are—
No. 0— $7\frac{1}{2} \times 6\frac{1}{2}$; No. 1— $9\frac{1}{2} \times 8$; No. 2— $10\frac{1}{2} \times 9\frac{1}{2}$; No. 3— 12×11 ; No. 4— 14×12 ; No. 5— $15 \times 13\frac{1}{2}$.

The SIZES OF **Savars** DOUBLE PROTECTORS are—

The SIZES OF Savaris DOUBLE PROTECTORS are—
No. 1— $10\frac{1}{2} \times 8\frac{1}{2}$; No. 2— $12 \times 9\frac{1}{2}$; No. 3— $13\frac{1}{2} \times 10\frac{1}{2}$; No. 4— $16 \times 12\frac{1}{2}$; No. 5— 17×14

Single, cover Chest only. **Double** and "Good Samaritan" Vest cover Chest and Lungs.

The Felt Protectors are manufactured from the purest Lambswool, purified without the aid of Chemicals,
and are coloured with Cochineal only.

Savars HARE-SKIN (English) ... ..	...	...	...	...	...	...	...	22/6,	25/-,	and 30/-	per doz.
Savars TASMANIAN WILD RABBIT SKIN	...	Small,	20/6	...	Medium,	23/-	...	Large,	25/-	"	"
		No.	...	0	1	2	3	4	5		
Savars PINE WOOL FELT ... ..	...	single	5/	6/	9/	11/6	14/9	19/6		per doz.	
" " " " " " "	...	double	11/6	15/	20/6	26/6	33/9	42/9		"	
Savars PINE WOOL FELT CHAMOIS, Lined and Perforated	...	single	6/	7/6	10/6	13/6	18/	23/6		"	
" " " " " " "	...	double	13/6	17/9	24/9	32/6	40/6	51/9		"	
THE HEALTH CHEST PROTECTOR (Liverpool Lint Co. Patent)	...	single	5/6	7/	8/6	10/6	14/	18/		"	
" " " " " " "	...	double	12/6	16/	23/	30/6	37/	45/6		"	
" Boxes containing 2 each size 1 to 6	...	...	...	...	...	...	single	14/	box.		
" " " " " " "	...	...	...	...	...	...	double	35/	"		

TO BUYERS OF QUANTITY WE GIVE SPECIAL DISCOUNTS.

LIVERPOOL:

LONDON:

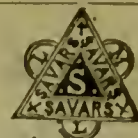
EVANS, SONS & CO.

EVANS, LESCHER & WEBB.

Also, Manchester, Birmingham, Sydney (N.S.W.), Montreal, Toronto, and Victoria (British Columbia).



RESPIRATORS.



TRADE MARK

No.		Retail per doz.
1.	Savars, Gent's METALLIC-Cotton Velvet pads .. oval	1/- 9/-
2.	" " SILVER WIRE GAUZE, Plated, Cotton Velvet Pads ..	2/6 18/-
3.	" " " PLATED, Silk Velvet Pads ..	3/6 24/-
4.	" " FINE SILVER PLATED WIRE GAUZE, Silk Velvet Pads ..	4/- 28/-
5.	" " OPEN SILVER PLATED Silk Velvet Pads ..	5/- 32/-
6.	" " Extra Fine " ..	6/- 40/-
7.	" " FINE, GOLD PLATED ..	7/- 48/-

No.		Retail per doz.
8.	Savars, Gent's Open, GOLD PLATED ..	oval 7/- 48/-
9.	" " Ladies' Fine " ..	7/6 50/-
10.	" " Open " ..	7/6 50/-
11.	" " Extra FINE SILVER PLATED ..	6/- 40/-
12.	" " Open " ..	6/- 40/-
13.	" " SILVER WIRE, Plated, Cotton Velvet Pads ..	2/6 18/-
14.	" " PLATED, Silk Velvet Pads ..	3/6 24/-
15.	PATTISON'S 1/- CORK RESPIRATORS ..	1/- 6/-

TRADE MARK



INHALERS.



TRADE MARK

1. Savars, Earthenware, with Glass Mouthpiece, (as Nelson's), Fig. 1 .. 3/ each 32/ doz.
2. Savars ANTISEPTIC RESPIRATOR INHALER .. 21/ "
3. SIEGEL'S STEAM SPRAY INHALERS (Fig. 2) Tin, 1/10; Brass, 2/10; Nickel-plated, 5/3 each.
4. SPARE TUBES FOR SIEGEL'S INHALERS .. 3/3 doz.
5. Savars POPULAR, Fig. 3 .. 18/ "
6. RANKIN & Co.'s IODO CARBOLIC .. 52/ "
7. HARRIES'S PERFECT INHALER. Enamelled Metal with Brass Caps and Glass Mouthpiece. Fig. 4 & 5 2/3 each.
8. Ditto, China, with Enamelled Metal Top, Brass Caps and Glass Mouthpiece. Figs. 4 and 5 .. 2/6 "
9. Savars Glass Popular, Fig. 3 .. 8/ doz.



Fig. 1.



Fig. 2.



Fig. 3.

TRADE MARK



WINTER REQUISITES



TRADE MARK.

CAMPHOR ROLLS (SAVARS EMOLLIENT).

1d. size, 8d. per dozen; 2d. size, 1/2 per dozen; 4d. size, 2/6 per dozen; 6d. size, 3/- per dozen.

CUBES CIGARETTES (SAVARS) combined with Stramonium and Cannabis Indica.

1/- boxes (12) 9/- per doz.; 2/6 boxes (36) 24/- per doz.

COLD CREAM (SAVARS SUPERIOR OTTO ROSE). 6d. and 1/- Pots; 4/- and 7/6 per dozen.

WHITE FOSSILINE. New Style 6d. Pots; 4/- per dozen.

EXTRACT OF CUCUMBER AND GLYCERINE.

In 2-oz. and 4-oz. panelled flats, with fancy label embodying a coloured design of the Cucumber plant.

Price: 1/- bottles, 6/6 doz.; 6 doz. 6/-; 12 doz., 5/6 doz. 6d. bottles, 3/6 doz.: 6 doz., 3/3; 12 doz., 3/- doz.

Name and Address 6d. doz. extra, or for 6 doz. FREE.

FLORAL BLOOM (SAVARS).

Attractively put up in 1/- Bottles .. 8/- dozen.

GLYCERINE JELLY (SAVARS).

In Opaque Glass Metal-screw Jars .. 6d. and 1/- retail; 4/- and 8/- per dozen.

In Corked Bottles .. 6d. and 1/- retail; 4/- and 8/- "

MENTHOL CONES.

We now put these up in a variety of forms to meet the requirements of the Trade, of which the following are particulars:—

- No. 1. WHITE WOOD, pedestal shape .. Fig. 1 3/ per doz.
- " 3. SMALL 6d. PEDESTAL, boxwood, in one-dozen boxes .. 2/9 "
- " 4. LARGE Boxwood, pedestal shape, each in a separate box, twelve boxes in an outer .. 4/ "
- " 5. ACORN SHAPE, boxwood, each in a separate box, twelve boxes in an outer .. 4/ "
- " 7. Boxwood, with reversible screw, each in a separate box, twelve boxes in an outer .. 4/ "
- " 8. In metal screw-capped bottles (16 cone) .. 2/9 "
- " 9. In metal screw-capped bottles (8 cone) .. 3/6 "
- " 10. 1/- rods, in metal screw-capped bottles—Discontinued.
- " 11. In handsome Counter Case, containing 1/2 doz. each, No. 7 & 16: 2 1/2 doz. No. 3; 2 1/2 doz. No. 12; 1/2 doz. each No. 13 & 14, Fig. 4, 20/ each.
- " 12. Boxwood, screw, button-shaped cases .. fig. 2 3/3 per doz.
- " 13. EBONY .. 4/6 "
- " 14. VEGETABLE IVORY .. 6/ "
- " 15. Assorted Box, containing 6. No. 12; 4. No. 13; 2. No. 14 .. 4/ "
- " 16. Boxwood STOPPER, with Glass Shade .. fig. 3 3/ "
- " 17. Ditto larger size .. 5/ "
- " 18. WHITE WOOD, pedestal shape, small size .. 1 2/ "
- " 19. Boxwood SCREW, button shape, large size .. 2 7 "



Fig. 1.



Fig. 2.



Fig. 3.

These Cones are guaranteed to contain nothing but pure Menthol, many offering being largely mixed with Spermaceti.

TO BUYERS OF QUANTITY WE GIVE SPECIAL DISCOUNTS.

LIVERPOOL—EVANS, SONS & CO.

LONDON—EVANS, LESCHER & WEBB.

Also, Manchester, Birmingham, Sydney (N.S.W.), Montreal, Toronto, and Victoria (British Columbia).

ESTABLISHED 1842.

THE SCHOOL OF PHARMACY
*Of the Pharmaceutical Society of Great Britain.*Chemistry, Prof. DUNSTAN, M.A., &c. Practical Chemistry, Prof. ATTFIELD, F.R.S., &c.
Botany, Prof. GREEN, B.Sc., &c. Materia Medica, Mr. H. G. GREENISH, F.L.S. Practical Pharmacy, Mr. JOSEPH INCE, F.C.S., &c.
FORTY-NINTH SESSION, 1890-91.

Application for admission to the School, for Prospectuses, or for further information or advice, may be made to the Dean, Prof. ATTFIELD, F.R.S., or to Professors or their Assistants in the Lecture Room or Laboratories, 17 Bloomsbury Square, London, W.C.

Now Ready, Second Edition, Crown 8vo., price 5s.

A PRACTICAL MANUAL OF VENEREAL AND GENERATIVE DISEASES:

Including SPERMATORRHOEA, PROSTATORRHOEA, IMPOTENOR, and STERILITY in Both Sexes.

By **M. K. HARGREAVES, M.D.**

Assistant Physician to St. John's Hospital for Diseases of the Skin.

LONDON: R. KIMPTON, 162 WARDOUR STREET, LONDON, W.

LONDON HOMOEOPATHIC HOSPITAL AND MEDICAL SCHOOL, GREAT ORMOND STREET, BLOOMSBURY, W.C.

President—THE LORD EMBURY. Chairman—MAJOR WM. VAUGHAN MORRIS.

Contains 90 Beds, and being entirely supported by Voluntary Contributions, Donations and Annual Subscriptions are earnestly solicited. The Hospital is always open to the inspection of visitors, and Clinical Instruction is given in the Wards and Out-patient Department to Medical Students and Practitioners. It possesses a valuable Library of Homoeopathic Publications, which Medical Men are invited to study. They are also invited to visit the Dispensary. The In-patients number over 700 annually; the Out-patients nearly 9,000 annually. The number of Patients treated since the inauguration in 1849 exceeds 215,000. It has a staff of 43 Nurses for Ward Nursing and Nursing Invalids at their residences.

G. A. CROSS Secretary-Superintendent

Published by **J. & A. CHURCHILL.****Mayne's Medical Vocabulary:** being an Explanation of all Terms and Phrases used in the various departments of Medical Science and Practice, giving their derivation, meaning, application, and pronunciation. Revised and enlarged by W. W. WAGSTAFFE, B.A., F.R.C.S. Sixth Edition, crown 8vo., 10s. 6d.**Watts' Chemistry** (Based on "Fornes"). Second Edition by DR. TILDEN, F.R.S., Professor of Chemistry in the Mason College, Birmingham.**Physical and Inorganic Chemistry.** With Engravings. Crown 8vo., 8s. 6d.**Organic Chemistry.** With Engravings. Crown 8vo., 10s.**A Manual of Botany,** including the Structure, Classification, Properties, Uses, and Functions of Plants. By ROBERT BENTLEY, Emeritus Professor of Botany in King's College, and to the Pharmaceutical Society. Fifth Edition, with 1,178 Engravings. Crown 8vo., 15s. [1]

LONDON: 11 NEW BURLINGTON STREET.

SOUTH-WEST LONDON SCHOOL

OF

CHEMISTRY & PHARMACY,**183 KING'S ROAD, S.W.**

(Close to Sloane Square and South Kensington Railway Stations).

LARGEST SCHOOL OF THE KIND IN GREAT BRITAIN.

PRINCIPALS.

W. H. MARTIN, F.C.S., M.C.S.I., and

E. VICTOR HILL, Pharmacist,

Assisted by EDWIN HADLEY, Esq., Prelim.

Sci. (M.B.), 1st B.Sc., &c.

And other Eminent Professors.

THE NEXT COURSE WILL COMMENCE ON OCTOBER 20.

FEES DECEMBER EXAMINATION—

Minor or Major £4 4 0

Preliminary... .. £1 15 0

For Evening Classes see Prospectus.

A unique feature of this School is its system of individual instruction, and Students availing themselves of the same cannot fail to pass their examinations the first time with credit both to themselves and their teachers. For further particulars and Prospectus apply personally, or to the Director, 183 King's Road, S.W.

ARTISTIC ADVERTISING!!**THE GEM GLASS PATENT SHOW TABLETS**

SPECIALITIES FOR DRUGGISTS AND CHEMISTS.

Pronounced by the many High-class Firms who use them to be the most Artistic and Beautiful Show Card now before the public. To be obtained from Messrs. MAW, SON & THOMPSON and Messrs. LYNCH & Co., Aldersgate Street, E.C., and Messrs. BARCLAY & SON (LIMITED), Farringdon Street, E.C.; or from the Works—

155 CURTAIN ROAD (corner of OLD STREET). LONDON, E.C.PRIZE MEDAL,
International
Health Exhibition,
1884.

THE NEW PERMANENT

ENGRAVED WINDOW TABLETSAWARD OF MERIT,
International
Sanitary Exhibition
1881.**IN RUBY, BLUE, AMBER, AND OPAL GLASS.**

Send particulars of size, subject matter, and colour, when price for one Tablet and upwards will be sent.

For Proprietary Articles, 100 8x6 Ruby Tablets, £3 15s. 0d.

J. R. CORSAN, THE LONDON SAND-BLAST WORKS, 80 GRAY'S INN ROAD, W.C.**TO PREVENT FRAUD, DEMAND BUSINESS CARD FROM TRAVELLERS.****WEDGWOOD ACID-PROOF MORTARS AND PESTLES.**

ALSO MANUFACTURERS OF

Funnels, Evaporating Pans, Electric Battery Fittings, Bed Pans, Urinals, Medicine Spoons, Physic Cups, Sick Feeders, Bleeding Basins, Medicine Measures, Eye Cups, Inhalers, Nursery Lamps, Wall Tiles, &c.

PRICE LIST ON APPLICATION. SPECIAL QUOTATIONS FOR LARGE ORDERS.

Any Article not bearing the Stamped Trade Mark "WEDGWOOD" is not made by us.

JOSIAH WEDGWOOD & SONS, STRUTHERIA, STOKE-ON-TRENT.

London Rooms: 87, ANDREW'S BUILDINGS, HOLBORN CIRCUS.

ENTERED STATIONERS' HALL

**DAVIS'
DOMESTIC
YEAR
BOOK,
1891.**

(ILLUSTRATED.)

EIGHTH YEAR OF
PUBLICATION.**THE OLDEST.
THE CHEAPEST.
THE LARGEST.
THE BEST.**Compiled expressly for
Chemists' distribution.
and highly commended
by their Customers.Published by J. DAVIS, at
201 OLD KENT ROAD, LONDON, S.E.SEND FOR SAMPLE
With Chemists' (who have adopted Year
Book) and their Customers' opinions.**TOWNSEND'S
ALMANACKS** 1891
FOR
SEND FOR SAMPLES.
J. TOWNSEND, LABEL PRINTER, EXETER.**ARTIFICIAL HUMAN EYES FROM GLASS.**

Excellent Quality. £8 per 100.

Plain Clinical Thermometers, in wood cases,
10/ per doz. Clinical Thermometers, with im-
perishable index, on massive tubes, about 4 1/2
inches, in boxwood cases, 16/ per doz.; in
nickel, 18/ per doz. Clinical Thermometers,
several kinds. Glass Syringes in all kinds and
sizes, at wholesale prices. Homœopathic
Medicine Glasses of all kinds.

REFERENCES REQUIRED.

OSCAR BOCK, Kiel (Germany), Manufacturer of all kinds of
Instruments from Glass.

Third Edition (Illustrated), price 6s. 8d.

**MUTER'S SHORT MANUAL OF
ANALYTICAL CHEMISTRY.**"At once the cheapest and most complete
laboratory guide for pharmaceutical students,
containing, within 200 pages, everything they
require to know, from the simplest testing to
the most elaborate quantitative work."London: SIMPKIN, MARSHALL & CO.,
Stationers' Hall Court, E.O.**J. RAPHAEL & CO.,**CHEAPEST HOUSE IN THE TRADE FOR
SPECTACLES, FOLDERS, FIELD, OPERA, AND
MARINE GLASSES.Repairs and Post Orders Despatched Same Day.
13 OXFORD STREET, LONDON, W.**SPONGE IMPORTERS.****M. PETERSON & CO.**

(ESTABLISHED 1870),

75 ST. ANNE STREET, LIVERPOOL.

FOR HOME, FOREIGN, & COLONIAL MARKETS.

BLAKE & MACKENZIE,

Medical Label & General Printers.

SCHOOL LANE, LIVERPOOL.

We make a speciality of **MEDICAL LABEL PRINTING**, and for Good Workmanship,
Neat Designs, Punctuality, and Price, can compete successfully against any house in the Trade.To Chemists who combine a **SEED TRADE** with their other business, we can supply them with every requisite suitable for that business, as we are
The Largest Makers of **SEED POCKETS** in the KINGDOM.Special attention is paid to Printing **Seed Catalogues**, Samples of which will be ready in November, and sent
free on application.**OUR CHEMISTS' CALENDARS FOR 1891 ARE NOW READY,**And we strongly recommend applying to us for
Samples before ordering elsewhere.We make all descriptions of **POWDER** and other **ENVELOPES**, which are second to none for Quality and Price.**CHEMISTS' STOCK LABELS, OF EVERY DESCRIPTION, KEPT IN STOCK.****Look!**We thank our Customers for
the patronage so kindly be-
stowed upon us, and beg to
remind them they will find
us ever ready to place the
resources of our office at their disposal.**BOWERS BROTHERS, Printers**
89, Blackfriars Road, and
25, Canterbury Road, Brixton, S.E.**Important Features.**NEWEST SHADES IN INKS.
NOVELTIES IN PAPER.
LONG EXPERIENCE.
ORIGINAL IDEAS.
LATEST DESIGNS.
FAST PRESSES.
CHEAPNESS.**Listen!****FINE** SATISFACTORY.
APPROPRIATE.
ATTRACTIVE.
ARTISTIC.
QUANT.
PLAIN.
ODD. **PRINTING**

WHAT APPEALS MORE PERSUASIVELY?

Bowers Brothers, Blackfriars, London, S.E.

PRIZE MEDAL, PARIS EXHIBITION, 1889.**ZUCCATO'S PATENT
TRYPOGRAPH**

NEW MODEL, 1888.

PRINT YOUR OWN NOTICES, CIRCULARS, PRICE LISTS, &c.
SIMPLE, CLEANLY, RELIABLE, CHEAP.
Price from 25s.PAYS FOR ITSELF AFTER A FEW TIMES USING.
5,000 Copies can be produced from one writing. Is invaluable to Chemists and Druggists for the
rapid production of Price Lists, Circulars, &c. &c. Full particulars, with specimens of work.
Testimonials, &c., on application to the Manufacturers and Patentees.**ZUCCATO & WOLFF, 12 CHARTERHOUSE STREET, LONDON, E.C.**

H. Silverlock
MEDICAL LABEL & GENERAL
Printer-Engraver
Lithographer & Manufacturing
Stationer
92, Blackfriars Road
LONDON.
Devised Catalogue
VARIOUS LABELS
ESTIMATES for every
description of printing required by the
MEDICAL PROFESSION, CHEMISTS,
PERFUMERS, AERATED WATER MANUFACTURERS
&c. forwarded POST FREE on application

DAVIS' 1891
ENT. STA. HALL. **TOILET**
ALMANAC
Appreciated by Chemists and their Customers for the past 21 YEARS. SEND FOR SAMPLE.
JOHN DAVIS & CO., LIM.
STEAM WORKS, 201 Old Kent Rd., LONDON, S.E.

FORD, SHAPLAND & CO.

MEDICAL LABEL & GENERAL PRINTERS, LITHOGRAPHERS, ENGRAVERS, &c., 6 GREAT TURNSTILE, LONDON, W.C.

PRIZE AND OTHER NEW DESIGNS FOR COUNTER BILLS

NOW READY. Printed in Colours, on White and Coloured Paper, for Chemists' Advertising. A Great Novelty.

CABINET PAPER

FOR THE WATER CLOSET.

In Registered Shape Boxes and in Packets.

Samples and Prices on application.

ORDINARY COUNTER BILLS,

On GOOD WHITE PAPER, at LOWEST PRICES ever offered.

10,000 CROWN OCTAVO BILLS (7½ in. x 5 in.) 12/0

10,000 DEMY OCTAVO BILLS (9 in. x 5½ in.) 17/6

ALL OTHER SIZES AT EQUALLY LOW RATES. SAMPLES AND PRICES ON APPLICATION.

Demy Paper and Wrapping Paper for Chemists, Twine, Sealing Wax, &c. Agents for Registration of Trade Marks. Designs Furnished if required.

HILDESHEIMER & FAULKNER'S POCKET FOLDING CALENDARS For 1891.

IN COLOUR AND MONOCHROME.

Prices
from
35/-
to
50/-
per
1,000.



Customers'
Names
and Adver-
tisements
printed to
order in
spaces left
on
Calendars
for
this purpose

DAINTY MEDIUMS FOR CHEMISTS' ADVERTISING.

APPLICATIONS FOR SAMPLES REQUESTED.

HILDESHEIMER & FAULKNER

41 JEWIN ST., E.C.

10

WINTER SEASON, 1890-91.

FAMILY REFERENCE ALMANACK, 1891.

Chemists may be supplied with the above popular Annual with their names, &c., on the cover, free of charge, on writing to Messrs. KAY BROTHERS LIMITED, and undertaking their distribution from house to house as soon as received. Also 1,000 bills for counter use, with name and address, if asked for. Enclose two (2) labels for correct address, with population of the district and best means of conveyance, under cover (labels on post-cards being contrary to regulations), addressed "Advertisement Department," at earliest convenience. The Almanacks will be sent direct from the printer with counter bills, show-cards, &c., if required.

TRADE "COAGULINE" MARK.

Kay's New Transparent Cement for Broken Articles.
"Clear as Crystal," "Stronger than Glass," "Tough as Leather," 6d., 1s., 2s., in Boxes, or on Cards.
Show-cards, Handbills, with name, &c. Specimens, &c., for home, or export, free.

KAY'S COMPOUND

Essence of Linseed, Aniseed, Senega, Squill, Tolu, &c.
(With Chlorodyne), 9½d., 13½d., 2s. 9d., &c.

KAY BROTHERS LIMITED.

LABORATORY WORKS:

ST. PETERSGATE MILLS, STOCKPORT.

👉 NOTICE TO THE TRADE. 👈

ALLEN & HANBURY'S desire to call the attention of Chemists to the great improvement they have effected in the manufacture of Compressed Tabellæ of sparingly soluble substances such as Sulphonal, Salol, Bismuth, Phenacetin and Compound Sulphur, &c. The great superiority of these

NEW DISINTEGRATING TABELLÆ

over the hard insoluble tablets previously offered is easily demonstrated by placing them in water. They at once begin to disintegrate and rapidly break down to a fine flocculent powder.

SAMPLES AND PRICE LIST ON APPLICATION TO

ALLEN & HANBURY'S, PLOUGH COURT, LOMBARD ST., LONDON, E.C.

LOEFLUND'S

MALT AND STERILIZED MILK PRODUCTS



Sole Agents—ROBERT BAELZ & CO., 14-20 St. Mary Axe, E.C.

LANCET.—"We have nothing but praise to bestow."

BRITISH MEDICAL JOURNAL. — "Pure
Hordeum possesses all the properties
claimed for it."

CHEMIST AND DRUGOIST.—"Pure Hordeum may be relied on to contain the highest attainable proportion of diastase."

KINDERMILK	} Infant
ALPINE MILK RUSKS (ground)		foods.

CREAM MILK, unsweetened, sterilized.
CREMOR HORDEATUM, delicious substitute for Cod-liver Oil.

PURE HORDEUM (Malt Extract); also
with Cod-liver Oil, Hops, Iron, Lime,
Quinine, and Pepsin.

MALT EXTRACT LOZENGES.
MUSTARD LEAVES, best and cheapest.

CO., 14-20 St. Mary Axe, E.C.

HOLLOWAY'S PILLS & OINTMENT

Have the Largest Sale of any Medicine in the World.

MANUFACTURED ONLY AT

Professor HOLLOWAY'S Establishment

78 New Oxford St. (late 533 Oxford St.), London,

And sold at 1s. 1½d., 2s. 9d., 4s. 6½d., 11s. 2s., and 3s. each Box or Pot.
Chemists and Druggists selling "Holloway's Pills and Ointment" can
on application to the above address, or to the Wholesale House with whom
they deal, be supplied free of charge with Handbills and Posters with their
name and address printed at foot.

Wholesale Terms see List of "Proprietary Articles" in most Price Currents

INDEX TO ADVERTISEMENTS.

Pages 27-29.

"WARRINGTON" CHLOROFORM

(Patent No. 8 525).

This Chloroform is manufactured from Ketones, guaranteed to be pure: it keeps well, answers to all the tests of the Pharmacopœia, or any other reliable tests, and is as safe for anæsthetic purposes as any other Chloroform sold; and, as Methylated Spirit is not employed in its preparation, it is obviously free from any objections that are supposed to be prejudicial to the use of an article so produced.

IT IS AS PURE AS THE ETHYLIC, AND CHEAPER THAN
THE METHYLIC CHLOROFORMS OF COMMERCE.

Supplies may be obtained from any of the Wholesale Houses by ordering
" WARRINGTON " Chloroform.

MANUFACTURER'S SOLE AGENT (Wholesale only)—

ALFRED H. MASON,
46 JEWIN STREET, LONDON, E.C.

TOBACCO AND CIGARS—MIXED PARCELS.

Every Requisite for the Smoker in One Order.

The following Manufacturers' Packet Tobaccos supplied at their List Prices, CARRIAGE PAID:—Wills, Cope, Bignett, Gallaher, Taddy, Ogden, Phillips, Player, Murray, Archer, Clarke, Brankston, Morris, Mitchell, Smith, Lambert & Butler, Pace, Goodwin, Duke, Kiney, Kimball, Richmond Cavendish Company, Carroll, Lorillard, & Co. Havana, Mexican, Manilla, Indian, and Swiss Cigars and Cheroots at Importers' Prices.

The Cigarettes of the following Firms at List Prices:—Goodwin, Allen & Ginter, Kinney, Duke, Kimball, Au Bon Fumeur, Wills, Player, Lambert & Butler, Copo, and the leading Egyptian and Turkish Houses.

BRITISH CIGARS from 4s. to 20s. per 100. All carefully selected and well matured. The largest and most varied stock in the United Kingdom to select from.

Irish Roll, Pigtail, Nailrod, Target, Cake, Plug, and all other hand
Tobaccos: also Flakes, Shags, Virginias, Cut Cavendish, and every descrip-
tion of plain and fancy Cut Tobaccos of standard quality at lowest prices.

Tobaccoists' Fancy Goods and Smokers' Sundries of every description at current rates.

Carriage paid on parcels from £2 upwards to any station in the United Kingdom.

SINGLETON & COLE, Ltd. { 'Tobacconists' Factors, Tobacco, Snuff
and Cigar Manufacturers & Importers
Cannon Street and Fore Street, BIRMINGHAM.

Cannon Street and Fore Street, BIRMINGHAM.

JOHN SANGER & SONS

Patent Medicine
Vendors,



DEALERS IN
Druggists'
Sundries,

LOZENGES, MINERAL WATERS, PERFUMERY, AND TOILET REQUISITES.

Chemists will do well to write for our LIST OF WINTER REQUISITES before ordering elsewhere. Attention is also called to a SPECIAL LIST of Cotton Wool, Lint, Corks, Teats, Twines, &c. Will be issued next month a List of useful and fancy goods suitable for Christmas Presents. Any of these, together with WHOLESALE CATALOGUE AND ADDENDA, sent free upon application.

TRIAL ORDERS INVITED. A VISIT TO SHOW ROOM CONFIDENTLY SOLICITED

Agencies of all kinds undertaken upon the most favourable terms.

Warehouse & Show Room: 489 OXFORD STREET, LONDON, W.

No BATH ROOM or CARRIAGE is fully Equipped without RANKIN'S CORK MATS.

Recommended by Medical Men.
**RANKIN'S
CORK MATS**
Recommended by Medical Men.

Warm, Soft, and Dry, Easily Washed, Clean, and Durable.
BATHERS! Step from the Bath on to Rankin's Cork Mats. They Prevent Chills in Bathing, and keep the feet warm and comfortable.
Mr. GLADSTONE pronounces them to be *very useful*, and Lord SALISBURY and many of the Nobility and Gentry now use and appreciate them. They prevent cold feet in Driving, in Church, in the Counting-house, in Stone-floored Apartments. Used by Housemaids for kneeling on. Numerous testimonials to their usefulness in a great variety of ways. Sizes: 1 ft. square to 20 x 45 in. Prices: 3/1, 7/6, and 10/6 each. Special Mats up to 21/ each.
CAUTION—Each Genuine Mat branded "Rankin's Cork Mat."
Wholesale terms on application to

WM. RANKIN & SONS, Cork Importers, GLASGOW & LISBON.

W. RANKIN & SONS, Cork Importers, GLASGOW & LISBON.



Of All leading Chemists & Furnishing Houses

A REAL COMFORT.

Wholesale Chemists' Agents: S. MAW, SON & THOMPSON.

AROMATIC TINCTURE OF IRON 'ATHENSTAEDT.'

- | | |
|--|--|
| (1) Contains a constant percentage of 0.2 % Metallic Iron. | (3) Stimulates the Appetite and expedites the Digestion. |
| (2) Is most agreeable to take, and free from the inky flavour common to other Iron Tonics. | (4) Does not affect Teeth. |
| | (5) Is free from Alkali. |

SAMPLES AND PAMPHLETS FROM THE SOLE AGENT:—

[3]

FREDERICK BOEHM, 27 Billiter Square Buildings, LONDON, E.C.



USED BY SURGEONS ALL OVER THE WORLD.

In ONE WEEK three curious uses were reported for which

"THE LEICESTER" IMPROVED ADHESIVE PLASTER,
On Fine Flesh-coloured Cambric,
is found the best, after trying other makes (in the first case, nearly every known plaster). A well-known actor said he had the good fortune to meet with it in the South of England, and had inquired for it wherever he went since. It is the only plaster he can find to answer for fixing false hair, &c. A chemist in the North wrote and said a lady violinist would have nothing else; she uses it to make a pad to protect her fingers. A chemist in Yorkshire has a customer who uses plaster to keep his eyes open, and nothing will hold the lids up so well as "The Leicester" Improved Adhesive Plaster on Fine Flesh-coloured Cambric. Surgeons in all parts are frequently commending it. The Sale rapidly increases.

1890. TWENTY-FOURTH SEASON.

THE LUNG PROTECTOR

(REGISTERED).



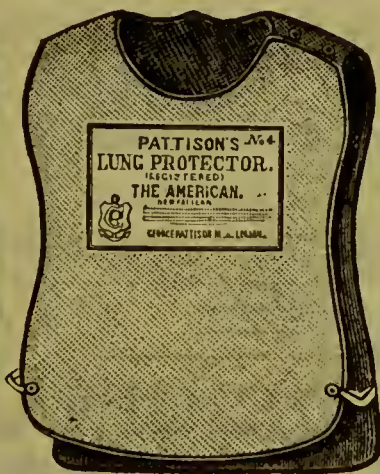
"AN ARTICLE OF ACKNOWLEDGED EXCELLENCE."

The "LUNG PROTECTOR" continues to be made only from the same Fine Soft Wool which has always been used since its introduction, 24 years ago.

Chemists are respectfully cautioned against imitations made from lower quality Wool, although sold as "Best Felt."



The Lung Protector.
ORIGINAL PATTERN.



Lung Protector.
THE AMERICAN.



Lung Protector.
THE CANADIAN.



Chest Protector.

PRICES:

	No. 0	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	No. 7
ORIGINAL PATTERN, Eight sizes	14/-	18/-	26/-	34/-	42/-	52/-	60/-	70/- per doz.
THE AMERICAN, Seven sizes	—	20/-	28/-	36/-	44/-	54/-	62/-	72/- "
THE CANADIAN, Seven sizes	—	22/-	30/-	40/-	50/-	60/-	70/-	80/- "

FELT CHEST PROTECTORS.

	No. 00	No. 0	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	No. 7
Nine sizes	4/-	6/-	8/-	10/-	12/-	16/-	20/-	24/-	28/- per doz.

All in Scarlet and White, and made in same Wool as the "Lung Protector."

FELT CHEST PROTECTORS, C QUALITY { Single .. No. 1, 7/-; 2, 9/-; 3, 11/-; 4, 14/-; 5, 18/- per dozen.
Double.. No. 1, 16/-; 2, 22/-; 3, 28/-; 4, 34/-; 5, 44/- per dozen.

These are warranted equal to BEST of other makers, but are NOT recommended.

Terms: All Wholesale Houses either allow a large Discount for Cash, or quote the goods at Reduced Net Cash prices.

GEORGE PATTISON,

INVENTOR AND MANUFACTURER,

139 ST. JOHN STREET ROAD, LONDON, E.C.



VINCENT WOOD

3 ST. ANDREW'S STREET, HOLBORN CIRCUS,
LONDON, E.C.

Telegraphic Address: "ACME LONDON." Established 1840.
Telephone No. 6757.



TRUSSES.

	Quality 1	2	3
Single, per dozen, Circular	12/0	13/6	15/0
Double	18/0	21/0	24/0
Scroals, Single, per dozen, Circular	30/0	36/0	42/0
Double	42/0	48/0	54/0

SPECIALITY—RED ENAMELLED NON-CORROSIVE STEEL SPRINGS. Perfect fit, quality guaranteed. our own make. 1/0 extra per dozen.

SURGICAL ELASTIC HOSIERY.

	Per pair.	Thread ditto.
Extra Stout Silk Stockings	7/6	4/6
" " Knee Caps	4/9	3/3
" " Anklelets	4/3	3/0
" " Leggings	5/6	3/9

Knee and Thigh Pieces, Knee Stockings, Wristlets, &c.



THE "EUREKA" MEDICATED PINE WOOL FELT APPLIANCES.

	Sizes 0	1	2	3	4	5	6
Chest Protectors, Single	6/0	7/6	9/6	12/6	15/6	18/6	21/6
Lung Double	13/0	15/6	20/0	25/0	30/0	36/0	42/0

Knee Caps Thigh Pieces, Throat Pieces, Neuralgia Caps, Socks, &c.



	Nos. 1	2	3	4	5	6	7	8	9	10
Suspensory Bandages	2/6	3/6	4/0	5/6	6/0	7/0	8/0	9/0	10/0	11/0

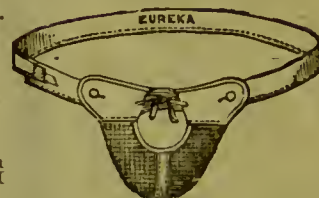
And so on up to 30/ per dozen. Every kind manufactured, 100 patterns to choose from.

Gentlemen's Abdominal Belts	from 12/0 to 31/0 per dozen.
Ladies'	24/0 to 150/0
Obstetric Binders (the "Eureka")	36/0, 42/0, 48/0, 54/0, 60/0
Chest Expanding Braces	from 21/0 to 72/0

Elastic Webs of all widths. &c.



ELASTIC STOCKINGS &c.



SPECIAL ORDERS EXECUTED IN A FEW HOURS.

The "Eureka" Brand of Goods may be obtained through all Wholesale Houses. If any difficulty in procuring them apply for name of nearest Agent. To induce the trade to stock exclusively in goods I supply, free of charge, Terra-cotta Statuette, Glaciers, Showcards, Circulars, Electros, &c.

PATRONISED BY HER MAJESTY.

BARBER'S ORIGINAL CRIMSON MARKING INK,

WHICH IS CHANGED BY HEAT TO A JET BLACK.

Put up for Retail Sale in 6d., 1s., 2s., 2s. 6d., and 5s. Bottles

ALSO

BARBER'S CONCENTRATED LIQUID COCHINEAL

FOR COLOURING JELLIES CUSTARDS, ETC.

Put up in 6d. and 1s. Bottles.

ALSO BARBER'S ARTIFICIAL IVORY FOR FILLING DECAYED TEETH,
1/- per Packet.



MANUFACTURED ONLY BY THE PROPRIETORS—

G. BARBER & CO., CLUB MOOR, LIVERPOOL.

Can be obtained through any of the Wholesale Firms in Great Britain, or from FELTON, GRIMWADE & CO., Melbourne; ELLIOT BROS., Sydney and Brisbane; KEMPTHORNE, PROSSER & CO., Dunedin and Auckland; FELTON, GRIMWADE & CO., Wellington; or direct from the Manufacturers—G. BARBER & CO., Club Moor, Liverpool, England.

JUSTICE!! JUSTICE!! JUSTICE!!

THE MENTHOL SEASON HAS ARRIVED,
AND WITH IT

SHIRLEY'S NEW CHINA FIGURE OF 'JUSTICE!'

She is a charming Biscuit Figure, pure white, intersected with gold, and is holding a balance in her right hand, with a sword of gold hanging on a girdle round her waist. She stands on a black pedestal, on which is also mounted two Menthol Cones, and at foot of the pedestal is an inscription.

WHAT DOES SHE SAY? She tells the public that the "A1" Brand Menthol Cones far excel all others for Neuralgia, Headache, Rheumatism, Sciatica, &c. Therefore, those who have this figure will find their trade in Cones rapidly increase, and will draw customers for these goods to their pharmacy, and this of course leads to their buying other articles as well, thus Chemists who are alive to their own interests will take advantage of securing this figure,

WHICH IS GIVEN AWAY WITH A 40s. ORDER.

BE FIRST IN THE FIELD WITH THIS CHARMING NOVELTY.

SPECIAL PARCELS have been arranged as under:—

PARCEL A.—All in PLAIN box-wood cases: 5½ doz. 6d.; 3 doz. 1s.; 2 doz. 4d.; realising when sold, 77s. = 37s. on an outlay of 40s. = 92 per cent. profit.

PARCEL C.—PLAIN Boxwood and other styles, assorted: 4 doz. 6d.; 2 doz. 4d.; 2 doz. 4½d.; and 3 doz. 1s.; realising when sold, 77s. = 37s. on an outlay of 40s. = 92 per cent. profit.

PARCEL E.—Printed Boxwood, only to sell at 4d. and 6d. each: 4 doz. 4d. and 9 doz. 6d.; realising 70s. = 30s. on an outlay of 40s. = 75 per cent. profit.

PARCEL G.—Printed Boxwoods and others, to retail from 1s. each: 5 doz. 1s. 1 doz. 1s. 6d.; realising 78s. = 38s. on an outlay of 40s. = 95 per cent. profit.



PARCEL B.—All in PRINTED Box-wood Cases: 5 doz. 6d.; 3 doz. 1s.; 2 doz. 4d.; realising when sold 74s. = 34s. on an outlay of 40s. = 85 per cent. profit.

PARCEL D.—PRINTED Boxwood and other patterns, assorted: 4½ doz. 6d.; 3 doz. 1s.; 1 doz. 4d.; 1 doz. 3½d.; 1 doz. 4½d.; realising when sold, 75s. = 35s. on an outlay of 40s. = 87 per cent. profit.

PARCEL F.—Plain Boxwoods and other patterns, to retail from 2d. to 6d. each: 6 doz. 2d.; 4 doz. 3d.; 1 doz. 3½d.; 3 doz. 4d.; 1 doz. 4½d.; 4 doz. 6d.; realising 68s. = 28s. on an outlay of 40s. = 70 per cent. profit.

PARCEL H.—SPECIAL 50s. PARCEL, made up of 1d. or 2d. sizes only, or an assortment of both.

PARCEL I.—Menthol Cones and other preparations of Menthol, embracing 3½ doz. 6d., 2 doz. 4½d., 1 doz. 1s., and 1 doz. 4d. Cones, 1 doz. Menthol Cocaine Toothache Tubos, 1 doz. 7½d. Menthol Ointment, 1 doz. 3d. Menthol Snuff, and 1 doz. packets of Menthol Leaves, realising when sold, 68s. 6d. = 28s. on an outlay of 40s. = 70 per cent. profit.

Some may think 40s. worth of Cones too many, but this is a great mistake—the Figure alone will sell them. The greater the show, the more you will sell, and the larger the profit.

ARTHUR W. SHIRLEY, 55 FARRINGDON ROAD, LONDON, E.C.

EXCHANGE COLUMN.

This Section of "The Chemist and Druggist" must be closed for press by Thursday noon of each week.
Remittances payable to EDWARD HALSE.

TERMS.

Advertisements in this department must be paid for in advance. From this rule no deviation can be made. Insertions are charged at the rate of 1d. per word, provided the advertiser attaches his name and address, for each word of which he must also pay at the same rate; or if he pays 1d. per word, his name and address will be registered and a figure attached to his advertisement. All correspondence referring to that figure must be addressed to 'The Publisher of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.,' and the figure must be distinctly endorsed upon the envelope. Letters will then be forwarded to their proper destination. A price is counted as one word, as e.g., £1 10s. 6d.

DEPOSIT OF MONEY.—In order to ensure safety we offer the following system:—The purchaser of anything advertised in the Exchange Column may remit the amount to us, accompanied by a commission of 6d. if the amount is £3 or under; and 1s. if over that sum. We acknowledge receipt of deposit to both parties, and hold the money until we are satisfied that either the goods are returned to their original owner or the purchase is completed.

Postal orders and cheques sent as deposit must be made payable to Edward Halse, and crossed "Martin & Co."

FOR DISPOSAL.

Formulæ.

Reliable recipes, 6d. each; full set of 130 neatly copied in book, 7s. 6d.; send for list.
"Chemist," Edwards, Wye, Kent.

Drugs and Chemicals.

Surplus opium, best Turkey, 12s. 6d. lb.; pepsine porci, 2s. oz.; post free. "Chemist,"
27 Ermine Street, Huntingdon.

Surplus stock of opium, potass. iodid., Bismuth, morphia, gms, turps, ipecac.; cheap.
Calow, Lingdale, Skelton, R.S.O.

Educational.

Books for London matriculation, as recommended by University Correspondence College, half price. 205/22.

Squire's "Companion," tenth edition; "Lexicon Medicum," Hooper, seventh edition; Kelly's Chemist's Directory, 1869; what offers?
Blinkborn, Salisbury.

Proprietary Articles.

Bigg's sheep-dip (2s.), will take; 50 and 20 lb. drums McDougall's exchanged. 207/30.

Moonseed bitters, surplus stock, at low prices. Apply, "Chemist," 69 Wright Street, Hull.

5 doz. kill cough, 1½ doz. Bird's blood pills, 1½ doz. tie sano pills, 1½ doz. Denzil Thompson's pills, 1½ doz. Herbert's anti-rheum, 2 doz. Hammond's pain paint; clean, 1s. 1½d.; offers. 207/24.

Shop Fittings.

Drawers, counters, dispensing-screen, earboys, specie-jars, wall and counter cases, desk and case, glass counter cases, and entire fittings of chemist's shop for sale together or separate; great bargains. Phillip Josephs, 54 Old Street, Goswell Road, London, E.C.

Veneered Spanish mahogany counter-case, 5 ft. 8 in. long, 8½ in. wide, 4 in. deep at back, 3½ in. deep at front. Apply, Clay & Abraham, Liverpool.

Second-hand shop-fittings, show-cases, abop-rounds, specie-jars, earboys, pill-machines, utensils, and every necessary for chemists commencing or fitting up branch shops, at half the usual prices; state requirements or call. Natali & Co., 184 Aldersgate Street London, nearly opposite Maw's.

Miscellaneous.

Three cwt. garlic (large, sound), 4d., or offers for lot. Mason, Bromsgrove.

Red lamp (plain) for sale by surgeon leaving neighbourhood, 17s. Apply, Dr. Fox, Bengoe, Hertford.

Neatly copied lecture notes of successful student (Botany, Chemistry, Physics), 15s. "Minor," 28 Tulse Hill, S.W.

Ol. bergamot, extra super. quality, can spare five 2-lb. bottles; price 24s. each, packed. Watson, Chemist, Shipley, Yorkshire.

Singer's Apollo safety, in perfect condition, hails to all parts, including pedals; all accessories. "Chemist," 1 Fore Street, Bodmin.

New-run honey, 6d. lb.; pure glycerine, 6½d. lb.; yellow vaseline, 4½d. lb.; white vaseline, 7d. lb.; sample three stamps. Johnson, Chemist, Godalming, Surrey.

Small hydraulic press, suitable for expression of juices, tincture-marks, &c., fitted with screw for use when less pressure is required; price 10/. Apply, Clay & Abraham, Liverpool.

Job lots of mineral-water and other bottles; 100 gross split lemons; 50 gross 10-oz. square dark coffee extracts; 30 gross cherry brandy quarts; what offers to clear? 85/61.

Pair gas-bags, pressure-boards, and oxy-hydrogen jet for magic-lantern or window attraction; good condition, cost nearly 8/., take 4/ 10s., or exchange acid. tart. or patents. Smith, Chemist, Pershore.

Cotton Wool.—Messrs. D. Ormerod & Son, Owlerr Carr Mill, Dulesgate, Todmorden, being overstocked, will send, carriage paid, 6 1-lb. rolls of the finest bleached or absorbent cotton wool on receipt of postal order for 7s., first quality guaranteed.

3 specie-jars, 21 in. high, 8s. each, the 3 for 21s., labels worn; 3-gall. show-bottle, handsome-cut stopper and mahogany stand, 10s.; shop jars, medical books, &c., list sent; also nearly new sewing-machine, genuine Wheeler & Wilson, New York, 3/ 112 High Street, South Woolwich.

WANTED.

Materia Medica cabinet. Harries, 43 Lordwood Road, Harborne, Birmingham.

"Materia Medica," Southall's preferred; Prantl and Vine's "Botany," Ganot, &c. Turner, 6 Acre Lane, S.W.

Six-gallon earboy, height 27 in. to top of stopper, in perfect condition; state lowest price. Lund, Chemist, Lancaster.

Bent-glass counter-case, 6 ft. long, 9 in. high, from 9 in. to 12 in. broad at the bottom; must be cheap. E. Sbarpe, 60 West Street, Leeds.

A few 6 to 12 gallon strong clean zinc or galvanised-iron tins or drums suitable for paraffin oil. Percy Carr, Ecclesall Road, Sheffield.

One or two tin ten-cupboards for storing 20 to 40 lbs. packet tea like Horniman's and Tower Tea Company supply. Particulars to W. A. Wood, Chemist, Clayton, near Bradford, Yorks.

Addresses Wanted.

Wilkinson & Co., essence of lemon manufacturers, late of 25 Savage Gardens, E.C. 18/92.
Dr. W. G. Hall, late in charge of one of Dr. Bourke's surgeries in Brixton, Major (?) Finney, late of Geneva Road, Brixton.
F. Goldby, Chemist, Herne Hill, S.E.

BOOKS FOR THE CHEMIST'S LIBRARY.

"THE ART OF DISPENSING." Price 3s. 6d. By post, 3s. 10d.

"HANDY BOOK OF MEDICINE-STAMP DUTY." By E. N. ALPE, of the Solicitor's Department, Somerset House. Price 2s. 6d. By post, 2s. 9d.

"MANUAL OF PHARMACEUTICAL TESTING." By B. S. PROCTOR, F.I.C. Price 2s. 6d. By post, 2s. 9d.

Published at the Offices of THE CHEMIST AND DRUGGIST, 42 Cannon Street, London, E.C.; and from all Wholesale Houses.

N.B.!

SPECIAL ATTENTION

IS

REQUESTED

TO

ADVERTISEMENT

OF

PLASTERS

AND

WINTER REQUISITES

ON

Pages 4, 5, 6, & 7
(BOTTOM FOLIOS)

OF THIS ISSUE.

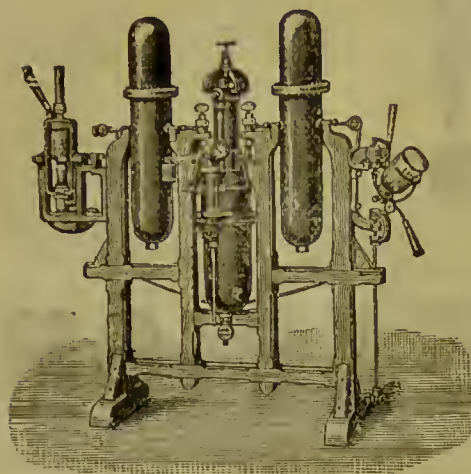
LIVERPOOL:

EVANS, SONS & CO.

LONDON:

EVANS, LESCHER & WEBB.

A. LOZÉ & CO., LD., 281 WEST DERBY ROAD, LIVERPOOL.



INDISPENSABLE TO CHEMISTS:
THE ONLY PRACTICAL SODA WATER MACHINE.
 Self-working by Chemical Action. No Skilled Labour.
 NOT LIABLE TO GET OUT OF ORDER OR NEED REPAIRS.
Produces the Purest Aërated Water made.

Machines, in two sizes, at 25 guineas and 30 guineas. All complete. With the smaller a lad can make easily in ten hours twenty dozen Syphons or 100 dozen Bottles; with the larger, thirty dozen Syphons or 175 dozen bottles.

COUNTY LABORATORY, 30 BROWNLOW STREET, LIVERPOOL, October, 1889.

I have examined during the present year the Machines for making Aërated Waters invented by Mr. Lozé, and I have formed a very high opinion of them. No lead is found in any part which comes in contact with the water, and the process is one which produces absolutely pure Carbonic Gas. Accordingly I find that the effervescing water produced is free from every injurious metal or contamination, and has a better flavour than that produced in the ordinary way.

J. CAMPBELL BROWN, D.Sc.

CHEMICAL LABORATORY, 20 ALBERT GATE, MANCHESTER, 21st August, 1889.

GENTLEMEN,—At your request I have visited the works of Messrs. A. Lozé & Co., of Prescott Street and Tuebrook, Liverpool. I have inspected his patented Apparatus for producing Aërated Waters, and have analysed the Aërated drinks manufactured. The results of analysis quite justified the inferences which were drawn from a knowledge of the materials used. Thus, instead of using ordinary whiting (as the source of carbonic acid gas), which gives off small quantities of offensive gases when acted upon with acid, Mr. Lozé uses one of the pure soluble bicarbonates of either Potash or Soda; the use of this salt enables the apparatus to be much simplified in form, as no gas washer is required, but the carbonic acid gas may be led at once into the liquid in the Saturating Cylinders. The Aërated drinks produced are of very high quality, both as to purity and as to Aëration, and the apparatus possesses the merit of extreme simplicity and efficiency.—Faithfully yours,

O. ESTCOURT, F.I.C., F.I.

Messrs. A. LOZÉ & CO., LIMITED.

DITTON, 10th April, 1890.

Dear Mr. Lozé,—I am pleased to inform you that I have been able to work the Machine sold to me by you without previous knowledge. With your patent Turnover I can bottle Patent Stoppers at the rate of two dozen per minute. Syphons and Corked Bottles I can fill much quicker than what you advertise the Machine to do.

The Aërated Waters produced have been sampled by a number of gentlemen, and pronounced by them to be of a most excellent quality.—Wishing you every success. I remain, yours truly,

ROBT. J. GOW, F.O.S.

CHALMERS' PATENT SAMPLE AND PARCELS POST BOX. **THE ONLY BOX** That fulfils ALL the requirements of the POST OFFICE.



Is fastened INSTANTLY.
 Cannot open by accident.
 Is immensely strong.
 Has no corners.
 No seams, joints, nor solder.
 Nothing to scratch or tear letters.
 Is practically air-tight:—Is used
 for Flour, Cherry Blossom,
 Sanitas, and Soap-Powders.
 Dispenses with string, bags, and
 paper.
 Saves 19 minutes out of 20.

OVER 300,000 SOLD.

SAVING THEIR OWN COST.

W. B. CHALMERS, 37 MINCING LANE, E.C.

146 MINORIES, LONDON E.C.
New York
Sydney
&c.

SODA WATER MACHINERY
AND ALL ACCESSORIES
FOR THE TRADE

BRATBY & HINCHLIFFE LIM.
HEAD OFFICE
SANDFORD ST. ANCOATS, MANCHESTER.

BOXES, BOTTLES, MACHINERY,
ESSENCES
Catalogues, Circulars, Testimonials
Post Free



SYPHONS & SELTZOGENES

GREAT REDUCTION IN PRICE.

We have recently been entrusted with a most important Agency for the above-named goods. Our Principals are the best known firm in Paris, and the Syphons are undoubtedly the cheapest and strongest in the market. The tops are made of pure English Tin, guaranteed free from lead. The Seltzogenes are made on the well-known "Fevre" system, and each one is thoroughly tested before being sent out.



WE CAN GIVE TO LARGE AND SMALL BUYERS EXCEPTIONALLY LOW PRICES.
PLEASE WRITE US AT ONCE FOR PRICES, STATING QUANTITY OF EACH KIND REQUIRED

SODA-WATER MACHINERY.

MELBOURNE EXHIBITION, 1889, UNPRECEDENTED SUCCESS.

We have obtained at the above Exhibition

3 HIGHEST AWARDS POSSIBLE

A feat never accomplished before by any other house supplying requirements for the Aerated Water Trade.

These awards will carry with them **THREE GOLD MEDALS**, which were awarded as follows:—

- 1st—SODA-WATER MACHINERY (Highest Award possible).
- 1st—ESSENTIAL OILS & FRUIT ESSENCES (Highest Award possible)
- 1st—PATENT AND ORDINARY BOTTLES (Highest Award possible).

WRITE FOR NEW ILLUSTRATED CATALOGUE, POST FREE.

BRATBY & HINCHLIFFE, LIM.

Aerated Water Engineers and Glass Bottle Manufacturers,

SANDFORD ST., ANCOATS, MANCHESTER.

And at 146 MINORIES. LONDON, E.C.

TO AERATED WATER MANUFACTURERS

HAY'S

SOLUBLE ESSENCES

REGISTERED

ARE GUARANTEED TO BE THE FINEST IN THE MARKET

ESSENCES OF GINGER, LEMON, ORANGE &C.

HOP ALE AND GINGER ALE ESSENCES.

Besides GOLD & SILVER Medals, these Essences have obtained the HIGHEST TESTIMONIALS from all the Medical Journals & from the Principal Trade Journals in this & other Countries.

W. HAY, MANUFACTURING CHEMIST BEVERLEY RD. HULL

PRICE LISTS FREE ON APPLICATION.

KRONENQUELLE.

THE FAMOUS NATURAL MINERAL WATER.

For
Gout, Gravel,
Rheumatism.



For
Kidney and
Bladder Diseases.

TO BE OBTAINED THROUGH ALL WHOLESALE HOUSES.

[1]

SOLE AGENTS, W. SCHACHT & CO., 26 Finsbury Pavement, LONDON. E.C.

"MYRTLE GROVE" TOBACCO

In 1-oz., 2-oz., and 4-oz. Packets, and $\frac{1}{2}$, $\frac{1}{4}$, 1 lb. Tins only.



TADDY & CO., 45 Minories, LONDON

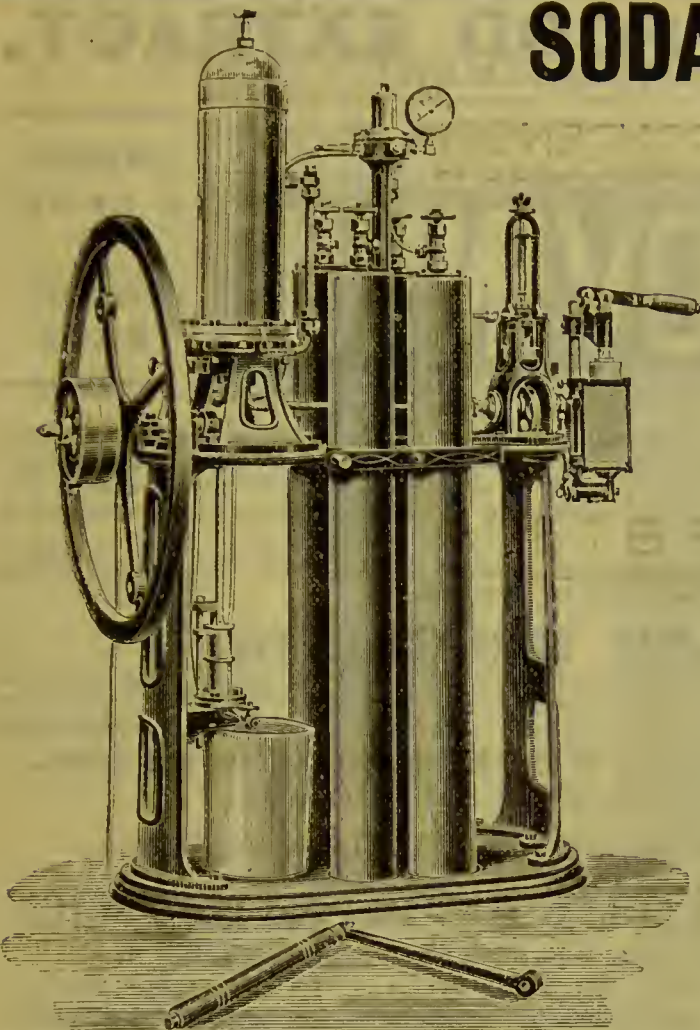


ESTABLISHED 150 YEARS,
SNUFF, TOBACCO, AND SEGAR MANUFACTURERS.

Write for List of Specialties.

SODA WATER MAKING

WITH
LIQUEFIED CARBONIC ACID GAS.



The No. 1 "Compact" Machine (as shown) is specially designed for Chemists and Hospitals, and can be used for either Syphons or Ball-stoppered Bottles

Producing capacity, by hand power, 60 dozens per hour.

Ditto, for steam power, 120 dozens per hour, with extra filling machine.

PRICE £60.

The No. 2 "Compact" Machine, made on the same principle, but smaller in its capacity.

Producing capacity, by hand, 25 dozens per hour.

Ditto, for steam, 60 dozens per hour, with extra filling machine.

PRICE £40.

Iron Vessel containing an average of 28lbs. by weight of Liquefied Gas } 10s. each.

And has sufficient Gas to manufacture about 20 gross Soda Water (10 oz. Bottles), or from 3,000 to 4,000 draughts from the Counter Fountain.

A Charge of £3 is made for the Iron Vessel, but when returned, the full amount is credited.

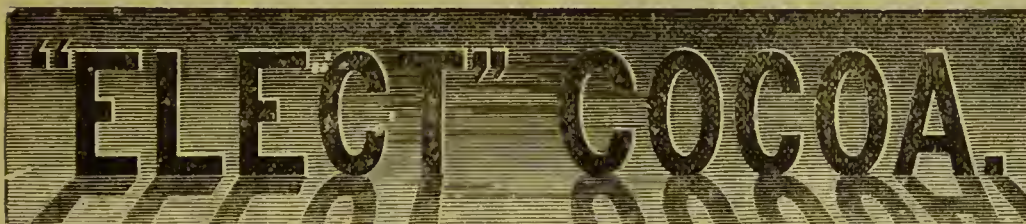
Send for Catalogue "C," giving complete information.
Forwarded free upon application to

BARNETT & FOSTER,
"Niagara Works,"
26^T Eagle Wharf Road, LONDON, N

ROWNTREE'S

The "MEDICAL PRESS AND CIRCULAR":—

"Certainly this preparation is of delicate flavour . . . It is perfectly soluble . . . the small quantity required for the immediate production of a cup of excellent cocoa will ensure for this 'Elect Extract' a favourable reception at the hands of persons of weak digestion, and all who prefer this wholesome beverage to tea and coffee."



The "BRITISH MEDICAL JOURNAL" says:—

"Rowntree's Cocoa Extract is one of the best. Its flavour and aroma are good. Cocoa thus prepared is one of the most digestible articles of food."

YORK, ENGLAND.



ROBINSON'S LIEBIG'S BEEF WINE.

Composed of Liebig's Extract of Beef, Extract of Malt, and sound Port Wine.

REPORT ON BEEF WINES.

From the results of my Analyses of various Beef Wines I have had occasion to examine, none have equalled as regards strength, purity of ingredients, and (of no less importance) the skilful and judicious manner in which the respective ingredients have been proportioned and combined, the Liebig's Beef Wine manufactured by Mr. B. ROBINSON, of Pendleton, Manchester.

It is in every sense a reliable preparation, embodying in a pleasing and palatable form all the acknowledged medicinal and nutritive properties pertaining to Liebig's Extract of Meat, Extract of Malt, and sound Port Wine.

WILLIAM ELBORNE, F.C.S., F.L.S.

Lecturer on Materia Medica in the Owens College, Manchester (Victoria University).
December 15, 1888.

Introduced 1855.]

ROBINSON'S CONCENTRATED WATERS.

[Introduced 1855.]

One Ounce of these Waters added to Forty Ounces of Distilled Water forms a clear Medicated Water (without filtering), similar in every respect to those prepared according to the directions of the British Pharmacopoeia, and free from all Chemical impurity. They will keep good any length of time in any climate.

Aqua Anethi, Concent., 4/ lb.	Aqua Cinnam. Ver. Concent., 6/ lb.	Aqua Fenniculi, Concent., 4/ lb.	Aqua Pimentis, Concent. 4/ lb.
" Anisi " 4/ "	" Cassia " 4/ "	" Ment. Pip. " 4/ "	" Rose " 8/ "
" Camphorae " 4/ "	" Flor. Aurant. " 8/ "	" Ang. " 4/ "	" Rose Virgin. " 10/ "
" Carui " 4/ "	" Flor. Sambuel " 8/ "	" Virid. " 4/ "	

The above are put up in Bottles of 4 lb. or 1 lb. and upwards, each of which has the Inventor's Protection Label over Cork.

From the LANCET, July 15, 1882:—"CONCENTRATED WATERS (Robinson's, Pendleton, Manchester).—Among the samples sent to us we find Aq. Anethi, Anisi, Cinnam. Ver., Rose, and some dozen of others. Diluted with forty parts of water they form the ordinary waters of the Pharmacopoeia. They are excellent in quality, and will be very useful, especially in country practice. [1]

Wholesale **HEARN & Co., London**, and most Provincial Wholesale Druggists. **PREPARED BY THE INVENTOR,**
B. ROBINSON, MANUFACTURING CHEMIST, DISTILLER, AND BREWER OF BRITISH WINES, MANCHESTER.

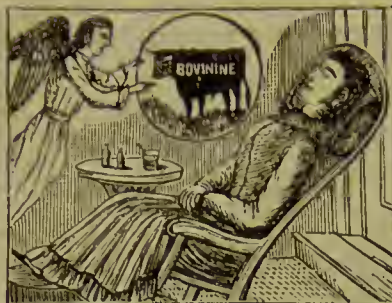
THE FIRST RAW FOOD EXTRACT.

(Introduced to the Medical Profession in 1878.)

AN IDEAL FOOD.

PALAT BLE.

KEEPS
PERFECTLY.



A CONDENSED FOOD

BOVININE

CONTAINING
20 PER CENT
OF
COAGULABLE
ALBUMEN.

THE VITAL PRINCIPLES OF BEEF CONCENTRATED.

BOVININE consists of the juices of lean raw beef obtained by a mechanical process, neither heat nor acid being used in its preparation. The nutritious elements of lean raw beef are thus presented in a concentrated solution, no disintegration or destruction of the albumen having taken place. The proteids in solution amount to twenty per cent. of the weight of the preparation, and give to it the great dietetic value it possesses in all conditions where a concentrated and readily assimilable food is needed.

BOVININE is entirely distinct from the numberless meat preparations prepared with heat. It is a Food, pure and simple, **Highly Concentrated**, and the most **Nutritious** yet presented.

TO CHEMISTS AND DRUGGISTS.

BOVININE has been prescribed and enthusiastically endorsed by thousands of Physicians and Surgeons in the United States and Canada for the past **Twelve Years**. We are systematically introducing **BOVININE** to the notice of the Medical Profession of Great Britain, and many are prescribing it daily. It is sold at prices within the reach of all.

In Bottles, 12 oz. (4s. 6d. size), 38s. per dozen; 6 oz. (2s. 9d. size), 24s. per dozen.

TO BE HAD OF ALL WHOLESALE DRUGGISTS.

The Trade supplied in Ireland by R. SIMPSON & CO., 16 Henry St., Dublin.

THE J. P. BUSH MANUFACTURING CO.

Laboratory at Chicago, Illinois. Principal Office, 2 Barclay Street, New York, U.S.A.

DEPOT FOR GREAT BRITAIN — 32 SNOW HILL, LONDON, E.C.

TRADE MARK.

IMPORTANT NOTICE.



The following paragraph by Professor Dr. FURBRINGER, Head Physician of the *Städtisches Allgemeines Krankenhaus im Friedrichshain, Berlin*, appears in the printed report from the Directorate of the said Hospital:—

"Denaeyer's Peptone has at last been adopted as the new means of nutrition, after trials, which were made on a large scale with a quantity presented to this hospital, had proved the undeniable advantages of this Peptone over all other peptone preparations in use. Among these advantages, special mention should be made of the pleasant flavour—enjoyed by nearly all patients—and of its form, which is a beautiful clear, amber-yellow sterilised liquid requiring no preparation before being used."

ENA EYER'S

LIQUID STERILISED PEPTONE OF MEAT.

Highly sterilised and concentrated, the only rational one, free from microbes, acknowledged the most efficacious means restoring **STRENGTH, DIGESTION, and APPETITE.**

It suits the most fastidious stomach, and is pleasant to the taste.

LIQUID STERILISED PEPTONATE OF IRON.

the most active and assimilable of all ferruginous preparations. Specially recommended in all cases where the stomach cannot bear iron in the ordinary forms.

OF ALL CHEMISTS AND WHOLESALE DEALERS.

ENA EYER'S PEPTONIDS & EXTRACT of MEAT CO., Lim.

118 BISHOPSGATE STREET WITHIN, LONDON, E.C.

20 RUE VANDERLINDEN, BRUSSELS.

General Agents for Scotland:—

Messrs. DUNCAN, FLOCKHART & CO., Edinburgh.

THE OLD APOTHECARIES COMPANY, Limited, Glasgow.

INJECTION INTO THE PERITONEAL CAVITY.

ROBERT W. BOYCE, M.R.C.S., L.R.C.P., made some Experiments, by Special Licence of the Home Secretary, on Caffyn's Liquor Carnis in the Pathological Department of University College, London.

Pathological Laboratories, University College, London.

February 24, 1890.

The experiments were undertaken to prove:—

(a) If, when "Liquor Carnis" was injected into the peritoneal cavity,

1. It was capable of being absorbed by the minute blood-vessels and lymphatics of the peritoneal membrane, and thus finding its way into the general circulation, acted as a rapid food and nutrient stimulant.

2. It would not give rise to peritonitis or inflammation of the peritoneal membrane.

(b) If when placed in the stomach, it was rapidly absorbed, with or without residue.

The animals used for experiment were six rabbits and three cats.

EXPERIMENT A.

Several bottles of Caffyn's Liquor Carnis were sent to me, and of every one I had occasion to use I felt sure of its freedom from irritating or inflammation-producing microbes or bacteria, by the purity of its smell. When heated, rapid and abundant precipitates of the nutrient substances occurred at various temperatures up to the boiling-point, when the whole was converted into a soft coagulum.

This liquid which I was about to inject was therefore extremely rich in albuminoid or nutrient substances; it was perfectly sweet to the smell and taste, and the glycerine with which it was mixed could not act otherwise than beneficially.

Having raised to blood-heat some Liquor Carnis, I injected 1 oz. into each of the peritoneal cavities of four rabbits. At the end of twenty-four hours I killed them. There was no trace of Liquor Carnis, nor was the peritoneum in the least inflamed or congested, nor had the temperature of the animal risen.

A fifth rabbit similarly treated, but killed at the end of six hours, showed no fluid. A sixth was injected on the separate days and killed twelve hours after the last injection. There was no trace of peritonitis or fluid.

CAFFYN'S - LIQUOR - CARNIS.

Similarly, when cats were used, there was no trace of fluid or peritonitis at the end of twenty-four hours, 2 oz. having been given instead of one. One killed two-and-a-half hours after injection of 1 oz. showed $\frac{1}{2}$ oz. of fluid in the peritoneum, but there was no congestion. The fluid was in all probability Liquor Carnis in the act of being absorbed, for it was much clearer in colour, and when heated did not give such an abundant coagulum.

This latter fact I hold of great importance, and wanting more confirmatory evidence: for it seems to show that the nutrient constituents of the Liquor Carnis more readily absorb than the water part. On several occasions after injection, urine was examined, and did not contain albumen; in other words, the nutrient substances of the Liquor Carnis were not excreted by the kidneys as fast as they were put in, but went to build up the tissues.

From these experiments I conclude that Liquor Carnis can, without danger, be injected into the peritoneum, that is, that it is perfectly non-irritating (the peritoneum is one of the most sensitive membranes in the body), and therefore much more likely to be tolerated by an irritable and diseased stomach: that within four hours, in these animals, one ounce is readily absorbed, and the body benefited by the corresponding amount of stimulant nutrient.

EXPERIMENT B.

Two ounces of Liquor Carnis were injected into the stomachs of the cats. At the end of two-and-a-half hours there was no trace of fluid, nor did the stomach present the least trace of redness or congestion. These experiments, which want further continuing, tend to show that Liquor Carnis is rapidly absorbed by the stomach, leaving no residue, not having been coagulated by the action of the gastric juice, and that thus a large quantity of food in its very best form can be put at the almost immediate disposal of the body tissues.

The immense importance of such a food at a time when, through accident or disease, the body is deprived of its nutrient blood and fluids, as in cholera, hæmorrhage, wasting diseases, &c., is manifest.

 Retail prices—Three-ounce Bottles, 2/-; Six-ounce, 3/6.

Pharmacists willing to distribute specimen bottles and literature to Medical Men will oblige by intimating the same to us and sending List of Medicos, with addresses. [6]

THE LIQUOR CARNIS CO., LTD.

50 HOLBORN VIADUCT, LONDON, E.C. Works: DEPTFORD, ENGLAND.

EIGHT PRIZE MEDALS AWARDED

GOODALL'S HOUSEHOLD SPECIALITIES.

YORKSHIRE RELISH.

Most Delicious Sauce in the World. Bottles, 6d., 1s., and 2s. each

GOODALL'S BAKING POWDER.

The Best in the World. 1d. Packets; 6d., 1s., 2s. and 5s. Tins.

GOODALL'S EGG POWDER.

One 6d. Tin is equal to 25 eggs. In 1d. Packets; 6d., 1s., 2s. and 5s. Tins.

GOODALL'S CUSTARD POWDER.

Delicious Custards without Eggs. In Boxes, 2s., 6d., and 1s. each

GOODALL'S BLANCMANGE POWDER

Delicious Blancmange in a Few Minutes. Boxes, 6d. and 1s. each.

GOODALL'S QUININE WINE, B.P.

Best Tonic yet Introduced. Bottles, 6d., 1s. and 2s. each.

GOODALL'S GINGER-BEER POWDER.

Makes the Best Ginger-Beer. Packets, 3d. and 6d.

GOODALL'S BRUNSWICK BLACK.

For Painting Stoves, Grates, Iron, Tin, &c. 6d. and 1s. Bottles

GOODALL'S LAVENDER WATER.

A Rich and Lasting Perfume. Bottles, 1s., 2s., and 5s. each

GOODALL'S PLATE POWDER.

For Polishing and Cleaning all Metals. Boxes, 6d., 1s. and 2s.

GOODALL'S JELLY SQUARES.

Make a Delicious and Nutritious Jelly. In $\frac{1}{2}$ -pint, 1-pint, and Quart boxes, 3d., 6d., and 1s. each.

PROPRIETORS—GOODALL, BACKHOUSE & CO., LEEDS

PATENT MEDICINES AND DRUGGISTS' SUNDRIES.

Monthly Price List of Patent Medicines, Druggists' Sundries, &c., will be sent post free on application to

GOODALL, BACKHOUSE & CO., LEEDS.

XMAS CHEER

DE CARLE'S WINTER BEVERAGES

Prepared from Fruit, combined with warm aromatics, making a delicious invigorating drink for the Festive Season, Evening Parties, Children's Gatherings, &c.

MAY BE USED WITH HOT OR COLD WATER.

Flavours—Clove, Peppermint, Ginger Punch, Ginger Lemon, Raspberry, Lemonade, Black Currant, Cherry Brandy, &c.

ONE PACKET MAKES $1\frac{1}{4}$ PINT BY THE ADDITION OF SUGAR AND WATER.

Retail at $4\frac{1}{2}$ d. each.

Good supply of Handbills sent with each order.

Order a 3-dozen Case, which we will send Carriage Paid for 10/-

DE CARLE & SON

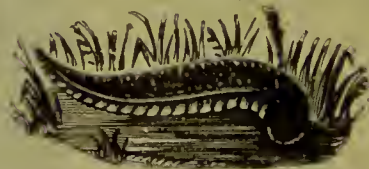
Manufacturing Chemists,

NORWICH.

Sole Manufacturers of

DE CARLE'S SOLID FRUIT JUICES.

HAMBRO SPECKLED



TRADE MARK
REGISTERED.

All Orders by Post receive immediate attention.

LEECHES!

Warranted Healthy. Wholesale and for Exportation. Direct from Marshes.

FITCH & NOTTINGHAM,

LEECH BREEDERS,
4 CANONBURY SQUARE, LONDON, N.

T. & F. J. TAYLOR'S



AERATED WATERS, Newport Pagnel.

ESTABLISHED 1835.

SODA, POTASH, SELTZER, AERATED (without Alkali), and LITHIA WATERS, LEMONADE AND GINGER ALE.

Each Bottle is protected by a Label bearing the Signature of the Firm.

Purity and Excellence of the Water certified by Analysis by Professor ATTFIELD, Ph.D., F.O.S.

COMPARE, AND THEN DECIDE.

5/6 per Gross.



BOTTLE SHAPE.

**PENNY
MENTHOL
CONES.**



BOTTLE SHAPE.

5/6 per Gross.

On $\frac{1}{2}$ -Gross Show Cards, with Elastic. Sample Free.

PETER TYRER, 70 LONG LANE, BOROUGH, LONDON, S.E.

EXTRACT OF MEAT

W. E. AYLWIN, 27 Leadenhall Street, LONDON, Broker to all the Leading Importers and Packers.
SAMPLES AND QUOTATIONS ON APPLICATION TO THE ABOVE.

BRAGG'S

Sold in Powder, 2/-, 4/-, and 6/- bottles; also in Biscuits, 1/-, 2/-, and 4/- tins (Children like these), and in Lozenges, 1/1 $\frac{1}{2}$ tins (portable and convenient).

Undoubtedly the most natural preventative and curative agent in all cases of Indigestion, Disorders of the Liver, Fevers, Cholera,

Dysentery, &c.

The trade cannot do better than keep these old-established and safe preparations under the notice of their customers.

**VEGETABLE
CHARCOAL.**



SOLE MANUFACTURER—

J. L. BRAGG, 14 WIGMORE ST., LONDON.

SHOW CARDS AND COUNTER BILLS ON APPLICATION.

"RAMORNIE." LIEBIG'S Extract of Meat.

As supplied to the Admiralty, War, and India Offices.

1-lb. Jars.....	per lb.	6/9	per doz.	81/0	2-oz. JARS.....	per lb.	7/8	per doz.	11/6
$\frac{1}{2}$ -lb. Jars.....	"	7/0	"	42/0	1-oz. JARS.....	"	8/4	"	6/3
$\frac{1}{4}$ -lb. Jars.....	"	7/8	"	21/9	$\frac{1}{2}$ -oz. JARS.....	"	8/8	"	3/3

QUOTATIONS FOR EXTRACT IN "BULK" ON APPLICATION.

Write for Detailed Price List to the Australian Meat Co., 9 and 11 Fenchurch Avenue, E.C.

8 lbs. Carriage Free.



Is used at meals in the same quantities as, and in lieu of, ordinary table salt

The Lancet, May 20, 1890, says:—"In Pepsalia we have a convenient means of aiding digestion."

The British Medical Journal, June 28, 1890, says:—"Pepsalia possesses a high degree of digestive power. We have satisfied ourselves that it affords a strong aid to digestion. The claims put forward for PEP-SALIA are justifiable."

The Medical Press and Circular, April 16, 1890, says:—"Pepsalia gives evidence of great digestive activity."

Dr. HEHNER, the eminent Analyst, says:—"Pepsalia, when used as an ordinary table salt, exercises powerful solvent action upon nitrogenous materials."

G. & G. STERN have received numerous Testimonials from Medical Men with reference to Pepsalia.

M.D., &c., Cavendish Square, writes, July, 1890:—"During the short time I have been trying your PEP-SALIA upon myself I have acquired the greatest benefit from it."

"An indigestion which has been slowly growing, resulting in flatulence, discomfort, and sleepiness after meals, general lassitude and depression, has with all these disagreeable symptoms vanished as by a charm since I commenced merely substituting PEP-SALIA for ordinary table salt with my dinner."

Surgeon Major —, M.R.C.S., &c., writes:—"PEP-SALIA promotes the digestive process of food. It cannot be too highly recommended."

M.D., M.R.C.P., London, writes:—"I have used PEP-SALIA, and am much pleased with it. It acts well as a digestive, and it gives me pleasure to recommend it to my patients."

F.R.C.S., London, writes:—"I consider PEP-SALIA a good digestive, having taken it myself for dyspeptic symptoms with great benefit."

Price 1s. and 2s. per Bottle. To Chemists, at 10s. and 20s. per Dozen, less 5 per cent. discount.

G. & G. STERN,
62 GRAY'S INN ROAD, LONDON, W.C.

Will send Samples for distribution among Medical Men, and Literature, free on application.

Telephone Number, 1852.

Telegraphic Address—CREMICUS LONDON.

ADVERTISERS' AND BUYERS' REFERENCE LIST AND INDEX TO ADVERTISEMENTS.

ADVERTISEMENTS APPEARING IN THIS ISSUE OF "THE CHEMIST AND DRUGGIST."

NOTE.—The Folios shown in this Index are those at the FOOT of the Page, and not at the Top. This arrangement is necessary in order to meet the requirements of the Post Office.

Foot of Page	Foot of Page	Foot of Page	Foot of Page
Allen & Hauburys..... 11	De St. Dalmas, A. 12	Kay Bros. 10	Robinson & Sons 50, 64
American Toilet Co. 55	Deutschmann & Woronelohe .. 48	Keith, B., & Co. 47	Roeke, Tompsitt & Co. 46
Andreas, O., & Co. 40	Downie B. I. P. Co. 63	Kemphorne, Prosser & Co. .. 47	Rookledge, J. 63
Apollinaris, The Co. Cover	Drysdale, J. W., & Co. 40	Kent & Sons. 42	Rowntree & Co. 21
Armbricht, Nelson & Co. 41	Durrant, G., & Co. 65	Kilner Bros. 59	Sainsbury, S. 64
Austin & Co. 68	Eade's Pills 42	Lakeman, J. J. 64	Sanders, H. G., & Sons. 54
Australian Drug Co. 44	Eau du Botot 55	Laying, R. C. 64	Saunders & Son. 64
Australian Meat Co. 25	Edwards, W., & Son 39	Lee, T. P., & Co. 64	Sanger & Sons. 12
Aylwin, W. E. 25	Elliman, Sons & Co. Text 550	Lennon, B. G., & Co. 46	Sanitas, The Co. Text 550
Ayrton & Saunders 51	Ellis & Co. (Lim.) 65	Levermore, A., & Co. 64	Schacht, W., & Co. 20
Baelz, R., & Co. 11	Eschmann Bros. & Co. 54	Levy, Julius. 46	School of Pharmacy, The 8
Barber, G., & Co. 14	Evans, Sons & Co. 4, 5, 6, 7, 17, 40, 43.. Cover	Liquor Carnis Co. (Lim.) 23	Scabury & Johnson 42
Barnett & Foster 21	Evans, Lescher & Webb, London .. 4, 5, 6, 7, 17, 40, 43	Liverpool Lint Co. 50	Shirley, A. W. 15
Barrett, R. H. 58	Evans & Sons (Lim.) 4, 5, 6, 7, 17, 40, 43.. Cover	Lofthouse & Saltmer. 33	Silicated Carbon Filter Co. Text 550
Barron, Harveys & Co. 39	Felton, Grimwade & Co. 46	London Homoeopathic Hospital .. 8	Silverlock, H. 10
Bayley & Co. 54	Ferris & Co. 38	and Medical School 8	Sinclair, Tweedie & Co. 58
Beach & Sons 64	Filce, E. 42	Low, C. 65	Singleton & Cole (Lim.) 11
Berkley, I. 65	Fitch & Nottingham 24	Lozé, A., & Co. (Lim.) 18	Smith, Stephen, & Co. 62
Billault 47	Fletcher, Fletcher & Stevenson .. Text 550	Lucas, C. W., & Co. 64	Soul, W. H., & Co. 44
Blair's Gout Pills 65	Ford, Shapland & Co. 10	Lynch & Co. Cover	South-West London School of .. 8
Blake & Mackenzie 9	Gardner, W. 60	Marion & Co. 34	Chemistry and Pharmacy. 8
Blondeau & Cie. 63	Gem Glass Co. (Lim.) 8	Mark, J., & Co. 65	Sprong, Thc, Co. 52
Blyton, Astley & Co. 31	Godfrey & Cooke 50	Marx, M. & E. 65	Steiner, E., & Co. 63
Bock, Oscar 9	Goodall, Backhouse & Co. 24	Mason, A. H. 11	Stern, G. & G. 26
Boehm, F. 12	Greiff, R. W., & Co. 33	May & Baker Cover	Stokes, G. R., & Co. (Lim.) 63
Bolsy 64	Green, C., & Co. 65	May, Roberts & Co. 42	Sumner, R., & Co. Cover
Bowdlear, W. H., & Co. 48	Greensill, T. S., & Son 64	Melin, C. 60	Taddy & Co. 20
Bowers Bros. 9	Guy's Tonic 42	Millar, A., & Co. 62	Taylor, T. & F. J. 24
Bowling & Govier 57	Hamilton & Co. (Lim.) 60	Moller, B. 42	Thompson, W. P., & Co. Text 550
Bragg, J. L. 25	Hargreaves, Dr., M.K., M.D. .. 8	Moss, J., & Co. Text 550	Tomlinson & Hayward 31
Bratty & Hinchliffe (Lim.) 19	Hatrick & Co. (Lim.) 55	Mumford, G. S. Text 550	Toogood, W. 61
Brett, F. J. Coloured Supplement	Hay, W. 20	Muter, Dr. 9	Townsend, J. 9
Brunner, Mond & Co. (Lim.) .. 26	Hildesheimer & Faulkner 10	Natali, E. 57	Treath, R. C. 54
Burgoyne, Burdighes & Co. 40	Hookin, Wilson & Co. 53	Newbery, F., & Sons 29	Truefitt, H. P. (Lim.) 56
Burroughs, James 62	Holloway's Pills 11	Noakes, B., & Co. Text 550	Tyrer, P. 25
Burroughs, Wellcome & Co. 33, 34	Hooper, W., & Co. Cover	Oldfield, Pattinson & Co. 3	Vaccine Association 56
Bush, J. P., Manufacturing Co. 22	Horn & Sou 64	Palau & Cie 58	Vogeler, The Charles A. 32
Bygrave, J. & W. 57	Howlett, S. 57	Pattison, G. 13	Walker, Troke & Co. 63
Cadbury Bros. Cover	Hyde, Nash & Co. 65	Peake, Allen & Co. 47	Warrick Bros. 52
Carter, J. H. 61	Isaacs, I., & Co. 58	Pears, A. & F. 35	Watson & Wates. 65
Chalmers, W. B. 18	Jackson, Harold 65	Peterson, M., & Co. 9	Wilcox & Co. 49
Chnrchill, J. & A. 9	Jewsbury & Brown 55	Phillips, G., & Co. 62	Wedgwood, J., & Sons 9
Clay, Dod & Co. 39	Jeyes' Sanitary Compounds Co. (Lim.) Text 550	Potter & Clarke 30	Wood, F. 50
Cocking & Co. 48	Jones & Co. 62	Poulenc Frères 48	Wood, Vincent 14
Colthurst & Harding 63	Kilner Bros. 62	Prosser, Taylor & Co. 45	Wolstencroft & Co. 65
Corsau, J. R. 8	Kimber Bros. 62	Quilliam, J., & Co. 64	Wright, Layman & Umney Text 550
Cyclostyle Co., The. 64	Kilner Bros. 62	Radams' Microbe Killer Co. (Lim.) 48	Wright, W. V., & Co. 34
Davis, J. 9	Kimber Bros. 62	Rankin, W., & Sons 12	Wyleys & Co. 37, 52
Davis, J., & Co (Lim.) 10	Kimber Bros. 62	Raphael, J., & Co. 9	Young, R. D. 55
De Carle & Son 24	Kimber Bros. 62	Riddough, F. 65	Ziemer, B. W., & Co. 54
Dee Oil Co. 56	Kimber Bros. 62	Robinson, B. 21	Zuccato & Woolf. 9
Denaeyer's Peptonoids and .. 22	Kimber Bros. 62		
Extract of Meat Co. 22	Kimber Bros. 62		

CLASSIFIED LIST OF ALL ADVERTISERS

Where Announcements appear in "THE CHEMIST AND DRUGGIST." These whose Names do not appear above are published in one of the other issues of this month.

AERTD & MINER'S AMMONIA

Apollinaris Co.
Barnett and Foster
Chemists' Aftated Waters
Association.
Ellis & Son (Ruthin)
Frans, Joseph, Co.
Hassall and Co. (Oitrie Acid
Phospho)
Hay, W.
Idris and Co.
Kinmond and Co.
Jewsbury and Brown
Mills and Co. (Bonne)
Schacht, W., and Co.
Taylor, T. and F. J.
[See GINGER ALL.]

DITTO PLANT

[See SYRONS and ESHYONS.]
Barnett and Foster
Bristol and Hinchliffe (Ld.)
Fayarger and Co.
Ferre, T.
Gueret Frères
Lozé, A., & Co.
Tylor, Hayward, and Co

ACETIC ACID

Dunn and Co.
Fuerst Bros.
Morris and Callard (Salts)

ALKALOIDS

Howards and Sons (Oinehona)
Smith, T. and H., & Co.

ALMANACKS

Blake and Mackenzie
Davis, J., and Co. (Lim.)
Hildesheimer and Faulkner
Kay Bros.
Tomlinson & Hayward

AGENCIES ABROAD

Aardt, Ed.
Australian Drug Co.
Bolsay
Cocking and Co. (Japan)
Felton, Grimwade and Co.
(Melbourne)
Fougers and Co. (New York)
Kemphorne, Prosser & Co. N.Z.
Lennon, B. G., and Co.
Levy, Jules
Norris, Zahn and Co.
Peake, Allen and Co.
Prosser, Taylor and Co.
Roberts (Paris, ac.)
Roeke, Tompsitt and Co. (Mel-
bourne)
Sharland and Co.
Soul, W. H., and Co.

APPARATUS

Clarke, S. (Food Warmer and
Bed Tray)
French Nickel Manufacturing
Co.
Orme, J., & Co. (Belentife)
Perken, Son and Haymet
Sinclair, Tweedie and Co. (Gas
Jet)
Thompson, C. (Gas-jet)
Wedgwood & Sons (Mortars)

ARTIFICIAL EYES

Bock, Oscar

BANDAGES

Bailey, W. H., and Son
Robinson and Sons
Schutze, F. and Co.

BATH GLOVES

Thompson, Walters, Hole
and Co. (Lim.)

BAKING POWDER

Goodall, Backhouse & Co.

BEEHIVES

Bowdlear, W. H., and Co.
Lunberger Wax Bleaching
Works

BICARB. SODA

Brunner, Mond and Co., Lim.
Howards and Sons
May and Baker

BISMUTH. PREP.

Hearon, Squire and Francis
Hewlett and Sons
Howards and Sons
May and Baker
Symes and Co.
White, Alfred, and Sons

BOTTLES

Aire and Calder Bottle Co. (Ld.)
Barnett and Foster
Barrett, R. H.
Brady and Hinchliffe (Ld.)
Bremitt's (Lim.)
Gilbertson, H., and Sons
Hearn, E. A., and Co.
Isaacs and Co.
Kilner Bros.
Mark, J., and Co.
Poths, J., and Co.
Shirley, A. W.
Thompson, Walters, Hole and
Co. (Lim.)
Toogood, W.
Youldon, W.

BLOOD MIXTURE

Lincoln and Midland Counties
Drug Co.

BOTTLE CAPPING

Beach, J., and Sons

BOOKS

Churchill, J. and A
Dr. Hargreaves, M.D.
Muter, Dr.

BOXES

Austin and Co. (Cardboard)
Ayrton & Saunders
Chalmers, W. B.
Noakes, B., and Co.
Owen, J. J.
Parmenter, I. W., & Co. Lim.
Robinson and Sons

BRUSHES

Dukas and Co.
Ellis & Co. (Lim.)
Fordnam, W. B., and Sons, Lim.
Kent, G. B., and Sons
Moseley, David and Sons

BUTTER OIL, &c.

Johnsen and Jørgensen
Oldfield, Pattinson and Co.
Hearon, Squire, and Francis
Tomlinson & Hayward

CAMPOR

Fuerst Bros.
Howards and Sons
Keene and Ashwell (Homoeo-
May and Baker (Pathie)

CAPSULES

(METALLIC)

Betts and Co.
Brooks, Peel and Co.
Mellin, O. (Machine)
Sanders, H. G., and Son

CAPSULES

Denoual, J. (Medicinal)
Duncan, Floekhart and
Evans, Sons and Co.
Fournier, Bon and Co.
Hooper, B., and Co.

CASTOR OIL

Allen and Haubury
Fuerst Bros.

OSCAR SACRADA

Duncan, Floekhart and Co.
Evans, Sons and Co.
Ferre, T.
Moss, J., and Co.

CATALOGUE

May, Roberts and Co.
Sanger and Son

CEMENT

Kay Bros. (Lim.)

CHALK PREP.

Dunn and Co.
Levermore, Ang., and Co.
White, A., and Sons

CHLORIDE OF GOLD

Rowland, L.

CHLORIDE OF LIME

Government Sanitary Co.
National Chemical Co.

CHEMICALS

Andreas, Oscar and Co.
Boehm, F.
Boschinger, C. F., and Sohne
Brunner, Mond and Co. (Lim.)
Bush, W., Son and Co.
Dunn and Co.
Fletcher, Fletcher & Stevenson
Fuerst Brothers
Goodall, Backhouse and Co.
Greiff, R. W., and Co.
Hill, A. S., and Son
Hodgkinson, Treacher and
Clarke
Howards and Son (Pharm.)
Kuhn, B.
Levermore, Aug., and Co.
Lothouse and Saltmer
Lorenz, H.
May and Baker
Morris and Callard
Moss and Co.
Poulet, Freres
Reade Bros. and Co.
Stern, G. and Co. (Lumiline)
Smith, T. and H., and Co.
White, A., and Son
Zimmermann, A. and M.

CRIST PROTECTA

Evans, Sons and Co.
Thompson, Walters, Hole and
Co. (Lim.)
Pa'tson, G.
Wood, Vincent

CHLORODYNE

Davenport (Browne's)
Towle, A. P., and Son

CHLOROFORM, &c.

Duncan, Flockhart and Co.
Macfarlan, J. F., and Son
Mason, A. H.
Smith, T. and H., and Co.
Wright, Layman and Umney
Zimmermann, A. and M.

CITRIC ACID

Hasall & Co. (Phospho)

COCAINE-HYDRO

Boehringer, C. F., and Sohn
Howards and Son

COCA WINE

Armbracht, Nelson and Co.
French Chemical Soc.
Mariani and Co.

COCOA & CHOCOLAT

Cadbury Bros
Fry and Sons
Rowntree and Co.
Van Houten's Cocoa

COD-LIVER OIL

Allen and Hanburys
Burroughs, Wellcome and Co.
Ell, A. S., and Son
Lothouse and Saltmer
Smith, T. J.
Southall Bros. and Barclay
Woolley, Sons and Co.

COPPER

Symington and Co. (Coffee
Essence)

COOLPSIBLE TUBES

Betts and Co.
Brooke, Peel and Co.
Sanders, H. G., & Son

COMP. MEDICINES

Allen and Hanburys
Blyton, Astley and Co.
Burroughs, Wellcome and Co.
Fuerst Bros.
Hooper, B., and Co.
Leo and Co.
Wyleys and Co.

CONFECTIONERY

Blyton, Astley and Co.
Gibson, R., and Son
Kerfoot, T.
Pascall, J.
Warrick Brothers

CONCENT. LIQS.

Evans, Sons and Co.
Fletcher, Fletcher & Stevenson

CORN CURES

Jackon, H.
Seabury & Johnson (Plasters)
Thompson, M. F.
Young, H.

COTTON WOOL

Haynes, G., and Co. (Absorbent)
Robinson and Sons (Absorbent)
Sanger, J., and Son
Seabury and Johnson

CASH LINSSEED

Mumford, G. S.

DANTIFRICES

American Toilet Co.
Van du Bator
Fentiman & Co.
Jewsbury and Brown
Lakenan, J. J.
Queich, H. ("Gardenia")
"Salvia"
Sutton, O., and Co.
"The Alexandra" (Zlemer)
Thompson and Capper
Warrick Bros.
Wood, W. (Aroca Nuts)
Wright, O., and Co.

DISINFECTANTS

Fletcher Bros. and Co.
Government Sanitary Co.
Hamilton and Co. (Lim.)
National Chemical Co.
Seabury and Johnson
Sanitas Co.

DISINTEGRATORS

Carter, J. H.

DOG MEDICINES

Spotts (Patent)

DRUGGISTS' SUP.

Ayrton and Saunders
Bailey, M., and Co.
Barnard and Sons (Limited)
Bertie-Smith & Co.
Davy, Humphrey, & Co.
Evans, Leecher and Webb
Evans, Sons, and Co. (Savary)
Gibbertson, H., and Son
Hill, A. S., and Son
Hockin, Wilson and Co.
Idris and Co.
Kay Bros., Lim.
Lee, T. P., and Co. (Chamois)
Lynch and Co.
Mark, J., and Co.
Marriot, E., and Co.
May, Roberts and Co.
Queich, H. O.
Rai kin, W., and Son
Sanger and Son
Schulze and Co.
Still, W. M., and Co.
Thompson, Walters, Hole and
Co. (Lim.)
Toogood, W.
Wood, Vincent

EAU DE COLOGNE

Farina, J. M.
Martin, Maria (Nun)

ELASTIC HOSE

Wood, V.

ELECTRIC APPAR

Durton, F., and Co.
Gent and Co.

EMBROCATION

Elliman, Sons and Co.

ENAMEL

Fordham, W. B., and Son (Lim.)

ENEMAS

Ingram and Son
Sanger and Son

ENGRAVERS

Barker, W., and Son

ESSENCES

Beckett, W.
Boehm, F.
Bratby and Hinchliffe (Ld.)
Burgoyne, Burdidge and Co.
Bush, W. J., and Co.
Cummock, J.
De Carle and Son
Fitzsimmons and Fearnley
Goodall, Backhouse and Co.
Hay, W.
Idris and Co.
May and Baker
Millar, A., and Co.
Oldfield, Patinson and Co.
Stevenson and Howell
Tyrer, P. (Anchovies)
Woolley, Sons and Co.

ESSENTIAL OILS

Boehm, F.
Bush, W. J., and Co.
Bush, W., Son and Co.
Clay, Dod and Co.
Cooking & Co. (Japan Peppars)
Cummock, J.
Drysdaile, J. W., and Co.
Evans, Sons and Co.
Fitzsimmons and Fearnley
Hodgkinson, Treacher and
Clarke
May and Baker
Stevenson and Howell
Symes and Co.
Tombarel Freres
Treatt, E. O.
Warrick Brothers
Wright, Layman and Umney
Vogt, G., and Co.

ETHER

Duncan, Flockhart and Co.
Howards and Son
May and Baker
Robinson, J., and Co.
White, A., and Son
Woolley, Sons and Co.
Wright, Layman and Umney

EXTRACTS, FLUID

Allen and Hanburys
Barber, G., and Co.
Burgoyne, Burdidge and Co.
Evans, Sons and Co.
Fletcher, Fletcher & Stevenson
Hearon, Squire and Francis
Hooper, B., and Co.
Moss and Co.
Potter and Clarke
Wright, Layman and Umney

EXTRACT, MEAT

Anstralian Meat Co.
Bovril (Limited)
Grand and Co.
Bush, J. P. Manufacturing Co.
Denaey's Peptone and Ex-
tract of Meat Co (Lim.)
Liebig Co.
Liquor Carnis Co. (Lim.)

EUCALYPTUS

Downie B. I. P. Co.

FILTERING

Fordham, W. B., and Son, Lim.
Silicated Carbon Filter Co.

FEEDING BOTTLS

Brefts, E. and Co., Lim.
Evans, Sons and Co.
Hearn, E. A., and Co.
Hockin, Wilson and Co.
Kliner Bros.
May, Roberts and Co.
Thompson, Walters, Hole and
Co. (Limited)
Toogood, W.

FLY PAPER

Biddles, W.
Ford, Shapland and Co.
Hockin, Wilson and Co.
Mather, W.
Tunbridge and Wright
Wilson, S.

FOOD (Infants & Invalids)

Allen and Hanbury
Baelz, R., and Co.
Brand and Co.
Braeg, J. L. (Charcoal Biscuits)
Bush, J. P. Manufacturing Co.
Goodall, Backhouse and Co.
Hearon, Squire and Francis
Liebig Co.
Liquor Carnis Co. (Lim.)
Mottershead & Co. (Benger's
Food)

GINGER AID

Hay, W. (Essence)
Mills, R. M., and Co.

GLUE

Deutchmann and Woroneicki
Fordham, W. B., and Son

GLYCERINE

Fink and Co.
Fuerst Bros.
Price's Candle Co.

GRANULAR PREP.

Blyton, Astley and Co.
Curtis and Co.
Hearon, Squire and Francis
Hill, A. S., and Son
Kerfoot, T.
Wright, Layman and Umney

GUM

Fink & Co. (Arabic, &c.)
Deutchmann & Woroneicki
Hyde, Nash and Co.
Levermore Aug., and Co.

HAIR PREP.

Chesebrough Mfg. Co.
Edwards and Co.
Truefitt, H. P. (Limited)

HERB BEER EXTS

Newball and Mason
Oldfield, Pattinson and Co.
Potter and Clarke

HERBALISTS

Butler, McCulloch and Co.
Newball and Mason
Potter and Clarke

HOMCEOPATHIC

Keene and Ashwell
Leath and Ross
Thompson and Capper
Watson and Waters

HOP ALESSENON

Hay, W.

HOSPITALS

London Homceopathic

HYPOPHOSPHITES

Duncan, Flockhart and Co.
Dunn and Co.
Fellows
Fletcher, Fletcher and Co.
Reade Bros. and Co.,
Symes and Co.
Typke and King

INHALERS

Anderson and Adams
Evans Sons and Co.
Godfrey and Cooke
Hockin, Wilson and Co.
Schulze, F., and Co.
Spirope Co., The
Toogood, W.

INSECTICIDES

Hockin, Wilson and Co.
Sanford and Co.
Shorey, J. F.
Steiner and Co.
Thompson, Walters, Hole and
Co. (Lim.)
Vogt, G., and Co.

INK [See MARKING]

Bewley and Draper
Duncan, Flockhart and Co.

KETCHUP

Tyrer, P.

LAMPS

Clarke's
Wentham, The, Co. (Lim.)

LARD

Ewen, J., and Son

LENCHES

Fitch and Nottingham

LINT

Liverpool Lint Co.
Newsome, O.
Robinson and Son
Seabury and Johnson

LIME JUICE

Idris and Co.
Riddle, A., and Co.

LOZENGES

Allen and Hanburys
Blyton, Astley and Co.
Gibson, R., and Son (Mentha)
Hill and Son
Kerfoot, T.
Pascall, J.
Raines and Co.
Warrick Bros.

MACHINERY

Bayer Freres.
Burroughs, Wellcome and Co.
Carter, J. H.
Goodall, E. P.
McPerran, J. A.
Mellin, O. (Capsuling)
Palau and Co.
Werner and Pfleiderer

MAGNESIA

Andreas, Oscar, and Co.
Bnah, W., Son and Co.
Dinnford
Henry, T. and W. (Oleated)
Hill and Sons, A. S.
Kerfoot, T. (Oleate)
Murray, Sir James, and Son
Queich, H. O.
Southwell, O., and Co. (Oleate)

MALT EXTRACT, &c.

Allen and Hanburys
Baelz, R., and Co.
Burroughs, Wellcome and Co.
(Kaiser's)
Hearon, Squire and Francis
Reade Bros. and Co. (Biscuits)
Oppenheimer Bros. and Co.

MARKING INKS

Barber, G., and Co. (Orimson)
Hickson, J.
Marx, M. and E.

MEDICINE CHSTS

Bentley, E., and Son
Day, Son and Hewitt (Veteri-
nary)
Day and Sons (Veterinary)

MENTHOL

Al Menthol Depot, A. W.
Shirley, Proprietor
Cooking and Co.
Hockin, Wilson and Co.
Tyrer, P.

MERCURIALS

Fuerst Brothers
Howards and Son
May and Baker

METHYLATED

SPIRITS

Burrough, J.
Harvey, J. W., and Co.
Jones and Co.
Phillips, G., and Co.

METHYLENE

Robbins, J., and Co.

MICROSCOPES

Darton, F., and Co.
Perken, Son and Bayment

MILK

Nestle, H. (Condensed)

MIXING

MACHINERY

Carter, J. H.
Gardner, W.
Werner and Pfleiderer

MORPHIA

Macfarlan, J. F., and Co.
Smith, T. and H.

MUSK

Ohrie, Antoine
Oils, Paints, &c.
Colthure and Harding
Fox, W., and Son

ONIMENT BASES

Burroughs, Wellcome and Co.
Chesebrough (Vaseline)
Fllice, E.
Grindley & Co. (Petroleum
Jelly)

OPHTHALMIC

Pomies, Dr.

OPTICIANS

Darton, F., and Co.
Perken, Son and Bayment
Raphael and Co.

OTTO OF ROSE

Fuerst Bros.
Treatt, E. C.

PAPAIN FINKLER

Kuhn, B.

PARALDEHYDE

Zimmermann, A. and M.

PATENT AGENTS

Fora and Son
Thompson, W. P., & Co.

PEPPERMINT OIL

Cooking and Co.

PEPSINE, &c.

Burroughs, Wellcome and Co.
Chassaing and Co.
Fletcher, Fletcher & Stevenson
Newbery F. & Sons (Ingluvin)
Warner and Co. (Ingluvin)

PATENT MEDICINE

Armbracht, Nelson and Co.
Atkinson and Barber (Infant
Preserv)
Barclay and Sons (Limited)
Beecham, T. (Pills)
Crouch, F. B.
Edwards and Son
Evans, Leecher and Webb
Fenning's (Powders)
Fllice, E.
Globe Chemical Co.
Goodall, Backhouse and Co.
Grosgrin, O.
Guy's Tonic
Hiscox, F.
Holloway (Pills and Oint.)
Hop Bitters Co. (Lim.)
Indian Tea Planters' Com-
bination
Lator (Phosphodyne, &c.)
Lincoln (Clarke's Mix.)
May, Roberts and Co.
Newbery and Son
Radam's Microbe Killer Co.
(Lim.)
Roberts and Co. (Foreign)
Sequal (Limited)
Sutton, W., and Co.

PATENT MEDCNS

(Cont.)

Thompson, Walters, Hole and
Co. (Lim.)
Vogeler, The O. A. Co.
Wilcox and Co.
Wilson, A. (Bunter's Nervine)
Wilson, J. (Anti-Stiff)

PERFUMERY,

FANCY SOAPS

Bayley and Co.
Boucean and Cie
Boehm, F.
Burroughs, Wellcome and Co.
Chesebrough Manufacturing Co.
Chiswick Soap Co.
Cook, E., and Co.
Dee Oil Co. (Limited)
Deutchmann and Woroneick
Durrant, Geo.
Ewen (Soaps)
Farina, J. M.
Giraud Fils
Greenhill, T. S., and Son
Mann, O. A., and Co.
Newbery and Son (Bardosa)
Ofinger, E.
Pears' Soap
Price's Patent Oandia Co.
Rosemarie Manufg. Co.
House & Co.
Sainsbury, S. (Lav. Water)
Shirley, A. W.
Thompson, Walters Hole and
Co. (Lim.)
Treatt, E. C.
Truefitt, H. P. (Limited)
Warrick Brothers
West, T. (Oleil's Mena)
Woolley, Sons & Co. (Powder)
Young, R. D.

PEROK. OF HYDR

Dunn and Co.
Robbins and Co.

PETROLEUM

Dee Oil Co. (Limited) (Jelly)
Grindley and Co. (Jelly)
Hartick and Co. (Luciline)
Snowdon, Son and Co. (Jelly)

PHOTOGRAPHIO

Botwright and Grey
Darton, F., and Co.
Howards and Son (Chemicals)
Marion and Co.
Orme, J., and Co.
Perken, Son and Bayment
White, Alfred, and Son

PINE PRODUCTS

Burroughs, Wellcome and Co.
Stern, G. and G.

PILL MACHINES

Palau, N., and Co.
Pindar, J. W.
Toogood, W. (Coater)

PORCELAIN GOODS

Toogood, (E. C. Pots, regist.)

PILLS (Coated, &c.)

Allen and Hanburys
Anderson Apothecaries Hall
Beecham, Thomas
Blair's Gout Pills
Eade's Gout Pills
Evans, Sons and Co.
Frere, L.
Hill, A. S., and Son
Howard, H.
Holloway's
Hooper's
Hearon, Squire, and Francis
McKesson and Sons
Newbery and Son
Robinson's
Warner, W. B., & Co. (Coated)
Wyleys and Co.

PODOPHYLLIN, &c.

Keith, B., and Co.
Smith, T. and H., and Co.

PLASTERS

Evans, Sons and Co.
Johnson and Johnson
Mather, W.
Quillman, J., and Co.
St. Dalmas, A. De
Seabury and Johnson
Thompson, M. F.
Young, H.

POLISHING

Bradley & Bonrdas (Albatum)
Fordham, W. B., and Son
(Limited)
Oakley, John, and Son

PRINTING

Bowers Bros.
Corran, J. B. (Glass)
Cyclostyle Co.
Ford, Shapland and Co.
Hildesheimer and Faulkner
Silverlock, H.
Townsend, J.
Zuccato and Woolf

PUMILINE

PHARM. PREPS.

Allen and Hanburys
Barron, Harveys and Co.
Bertie-Smith and Co.
Billault
Boehm, F.
Brady and Martin
Burgoyne, Burdidge & Co.
Burrongs, Wellcome & Co.
Chassagny and Co.
Dee Oil Co. (Limited)
Deutschmann & Woroneicki
Dunoon, Flockhart and Co.
Fellows
Ferris and Co.
Fletcher, Fletcher and Co.
Fournier, Bon and Cle
Fruean, E.
Giles Schacht & Co.
Green, R. W., and Co.
Green, C., and Co.
Hearon, Squire and Francis
Hewlett and Son
Hill, A. S., and Son
Hooper, B., and Co.
Howards and Sons
Jeyes Sanitary Compounds Co.
Keith & Co. (Conc. Mixtures)
Lorenz, H.
Martindale, W.
May and Baker
Potter and Clarke
Rankin and Borland
Ricqles and Co.
Roberts and Co.
Salvino, The, Co.
Southall Bros. and Barclay
Sutton, W., and Co.
Symes and Co.
Trommsdorff, H.
White, Alfred, and Sons
Willows, Francis and Butler
Woolley, Sons and Co.
Wyleys and Co.

RENNET

Dunoon, Flockhart and Co.
Johnsen and Jorgensen
Oldfield, Pattinson and Co.

SACCHARIN

Allen and Hanburys
Burrongs, Wellcome and Co.

SALICYLIC ACID

Burgoyne, Burdidge and Co.
Ferner Bros. (Kolbe's)
Zimmerman, A. and M.

SALT

Stern, G. & G. (Pepsalia)

SALICIN

Macfarlan and Co.
Smith, T. and H., and Co.

SALOL

Kuhn, B.

SAUCE & PICKLES

Goodall, Backhouse and Co.
Tyrer, P.

SCHOOLS, &c.

City School of Chemistry and Pharmacy (Lim.)
Davis, F.
Liverpool School of Pharmacy
London Homoeopathic and Medical School
Manchester College
Northern School of Pharmacy
Owen's College
Royal College of Science
South London School of Pharmacy (Lim.)
South-west London School of Pharmacy
The School of Pharmacy
Westminster College

SELTZOGENES

Bratby and Hinchliffe, (Ld.)
Evans, Sons and Co.
Lynch and Co.
May, Roberts and Co.

SHEEP DIP

Fletcher Bros. and Co.
Hamilton and Co. (Lim.)
Wilkin's

SHOP FITTERS

Bowling and Goyler
Bygrave, J. and W.
Evans, Sons and Co.
Howlett, S.
Natali, E. (Show Cases)
Poths, H., and Co.
Treble, G., and Co.
Yates, W. S.

SOAP

Ayrton and Saunders
Bayley and Co.
Blondeau and Co. (Vinolia)
Oblawick Soap Co.
Cook, E., and Co.
Ewen, J., and Sons
Fordham, W. R., and Sons (Ld.)
James, F., and Co. (Dermatos)
Lucas and Co.
Pears' Soap
Stern, G. and G.

SPONGE

Cresswell Bros.
Marks, H., and Sons (Ld.)
Peterson, M., and Co.

SPECTACLES

Botwright and Grey
Darton, F., and Co.
Perken, Son and Rayment
Raphael and Co.

SPIRIT

Burrongh, J. (Pure & Methyl)
Harvey, J. and W., and Co.
Jones and Co. (Methyl)
Macnair, A., and Co.
Phillips and Co.
Smith, Stephen and Co.

STAMPS (REVENUE)

Berkley, J.
Dickinson, J.
Pollard, A. W.

STARCH

Reckett, S.
Oritheley (Gloss)

STOPPERS

Austin and Co. (Sprinklers)
Barnett and Foster
Sanders, H. G., and Son

STOVES

Clark, S., and Co. (Lim.)

SUGAR

Gibson, R., and Sons

SURGICAL

Ayrton and Saunders
Bailey, W. H., and Son
Barclay and Sons (Limited)
Cooking, J. T.
Christy, T., and Co.
De Luca, G. V.
Eschmann Bros. and Walsh
Haywood, J. H.
Ingram and Son
Liverpool Patent Lint Co.
Mestivier and Co.
Robinson and Sons
Schutze, F., and Co.
Schoenfeld Frères
Still, W. M., and Co.
Thompson, Walters, Hole and Co. (Limited)
Wood, F.
Wood, Vincent

SULFONAL

Burrongs, Wellcome and Co.
May and Baker

SYPHONS

Barnett and Foster
Bratby and Hinchliffe (Ld.)
Favarger and Co.
Kilner Bros.

SYRINGES

Bock, O.
De Luca, G. V.
Schoenfeld Frères

SYRUPS

Fletcher, Fletcher (Liquors)
Idris and Co.

TABLETS

Corsan, J. R. (advertising)
Gem Glass Co. (Ld.) (advertising)

TILL

Stokes, G. R. & Co.

TEA

French and Langdale
Gt. Tower St. Tea Co.
Walker and Dalrymple

THERMOMETERS

Walley, W. H., and Son
Bock, O.
Darton, F., and Co.
Parken Son and Rayment

TINS

Noakes, B., and Co.

TOBACCO, CIGARS

Lynch and Co.
Pencecock, M. & R.
Singleton and Cole (Lim.)
Taddy and Co.

TOILET

Evans, Sons and Co.
Fordham, W. B., and Sons (Lim.)

TOILET

Fowler, E.
Layne, R. O.
Morse and Co. (Ivorine)
Mumford, G. B.
Qualeh, H. O.
Salvino, The, Co.
Truett, H. C. (Limited)
Woolley, Sons and Co.

TOOTH PASTE

American Toilet Co.
Jewellery and Brown
Sutton, O., and Co. (Block)
Wilson, A. (Bunter's)
Woode, M. (Arecia)

TRADE MARKS

Horn and Son

TYPE-WRITING

Pollard, A. W.

TRUSSES

Bailey, W. H., and Son
Colwell, H. M.
Haywood, J. H.
Mather, W.
Thompson, Walters, Hole and Co. (Lim.)
Wood, F.
Wood, V.

URETHANE

Howards and Sons

VACCINATION

Vaccine Association (Lymph)

VALUERS AND**TRANSF. AGENTS**

Berdos & Co.
Brett, F. J.
Crocker, G. B.
Orridge and Co.

VASELINE

Chasebrough Manufacturing Co.

VERMIN KILLERS

Sanford and Son
Steiner and Co.

VINOLIA

(Superfatted Medical and Toilet)
Blondeau and Co.

VITRIFIED

Corry, Soper, Fowler and Co. (Limited)
Day and Sons
Day, Son and Hewlett
Down, H., and Co.
Elliman, Sons and Co.
James, W. H. (Blisters)
Rookledge, J.
Spratts (Dogs)
Sutton, F., and Co.
Wyleys and Co.

WAX

Wyleys & Co.

WHOLESALE AND**REPT DRUGS**

Allen and Hanburys
Barron, Harveys and Co.
Bertie-Smith & Co.
Burgoyne, Burdidge and Co.
Bush, W., Son and Co.
Bueh, W., and Co.
Clay, Dod and Co.
Davy Humphrey, and Co.
Evans, Sons and Co.
Evans, Lecher and Webb
Evans and Sons (Limited)
Ferris and Co.
Fox, W., and Sons
Goodall, Backhouse and Co.
Harker, Stagg and Morgan
Hearon, Squire and Francis
Hewlett and Son
Hill, A. S., and Son
Hodgkinsons, Treacher
Clarke
Lofthouse and Saltmer
Macfarlan, J. F., and Co.
Oldfield, Pattinson and Co.
Potter & Clarke
Ryves and Co.
Thiermann, H., Jun.
Thompson and Copper
Thompson, Walters, Hole Co. (Limited)
Walker, Troke and Co.
Willows, Francis, and Butl
Woolley, Jas., Sons and Co.
Wright, Layne and Umna
Wyleys and Co.

WINES, SPIRITS

Coleman and Co. (Meat and Durrant, G. (Orange) Malt,
Goodall, Backhouse and Co.
Idrie & Co.
Miller, A., and Co.
Robinson, B.

BERDOE'S TRIPLE FRENCH PERFUMES



THESE PERFUMES have been known to the trade for many years past, and their steadily increasing sale is the best proof of the appreciation in which they are held. Notwithstanding that the prices of some brands of perfumes have been reduced, F. NEWBERRY & SONS find it both impossible and needless to offer any other advantages to buyers than—(1) the excellent quality of the Perfumes themselves, (2) their price. The object kept in view is not to produce goods which may be sold at a given price and leave a given margin of profit, but to produce such as shall equal or surpass a given standard of quality.

BERDOE'S TRIPLE

In PLAIN STOCK BOTTLES of 20 oz., 10 oz., and 5 oz.

		£	s.	d.
Ess. Bouquet	.. ..		
Frangipane	.. ..		
Jasmin	.. ..		
Jockey Club	.. ..		
Millefleurs	.. ..		
New Mown Hay	.. ..		
Opoponax	.. ..		
Patchouli	.. ..		
Rondeletia	.. ..		
Stephanotis	.. ..		
Ylang Ylang	.. ..		
	per 20 oz.,	0	8	7
	per 10 oz.,	0	4	4
	per 5 oz.,	0	2	3

The above are the leading Essences, and to these the special attention of customers is asked. Those who desire greater variety will find in "Newberry's Catalogue" a more extended list.

F. NEWBERRY & SONS,



FRENCH ESSENCES.

		£	s.	d.
Violets	.. ..		
Wood Violet	.. ..		
	per 20 oz.,	0	11	3
White Rose, 20 oz., 9s. 10d.; 10 oz., 5s. 1d.; 5 oz., 2s. 7d.				
Eau de Cologne	.. ..		
Lavender Water	.. ..		
	per 20 oz.,	0	4	4
	" 10 "	0	2	5
	" 5 "	0	1	2

Berdod's Perfumes, in Handsome Show Bottles for the Counter, Rose Cut Stoppers, Vitrified Opal Shield Labels with Gold Border and Black Letters, from 11s. 6d. each.

Established A.D. 1748.

1 & 3 KING EDWARD STREET, LONDON, E.C.

HERBS IN PACKETS.

Facsimile of Face of Packet.

Each Packet bears
this Registered Trade
Mark.



PRICE—

7s. per gross

In $\frac{1}{2}$ -gross boxes assorted to order.



Guaranteed Pure
and
Good Quality.



PRICE—

7s. per gross

In $\frac{1}{2}$ -gross boxes assorted to order.

SPECIAL FEATURES.

TASTEFUL DESIGN. FULL DIRECTIONS FOR USE.

HERBAL RECIPES ON EACH PACKET.

ALL HERBS CAREFULLY SELECTED.

 Take care to order the “WINGED LION BRAND.”

DESCRIPTIVE PAMPHLETS WITH EACH ORDER

Entitled “POPULAR HERBAL REMEDIES.”

[3]

SPECIMEN SAMPLE AND FULL LIST ON APPLICATION.

POTTER & CLARKE,
5, 6, & 7 RAVEN ROW, Artillery Lane, LONDON, E.

BLYTON, ASTLEY & CO.

Eagle Laboratories, MANCHESTER,

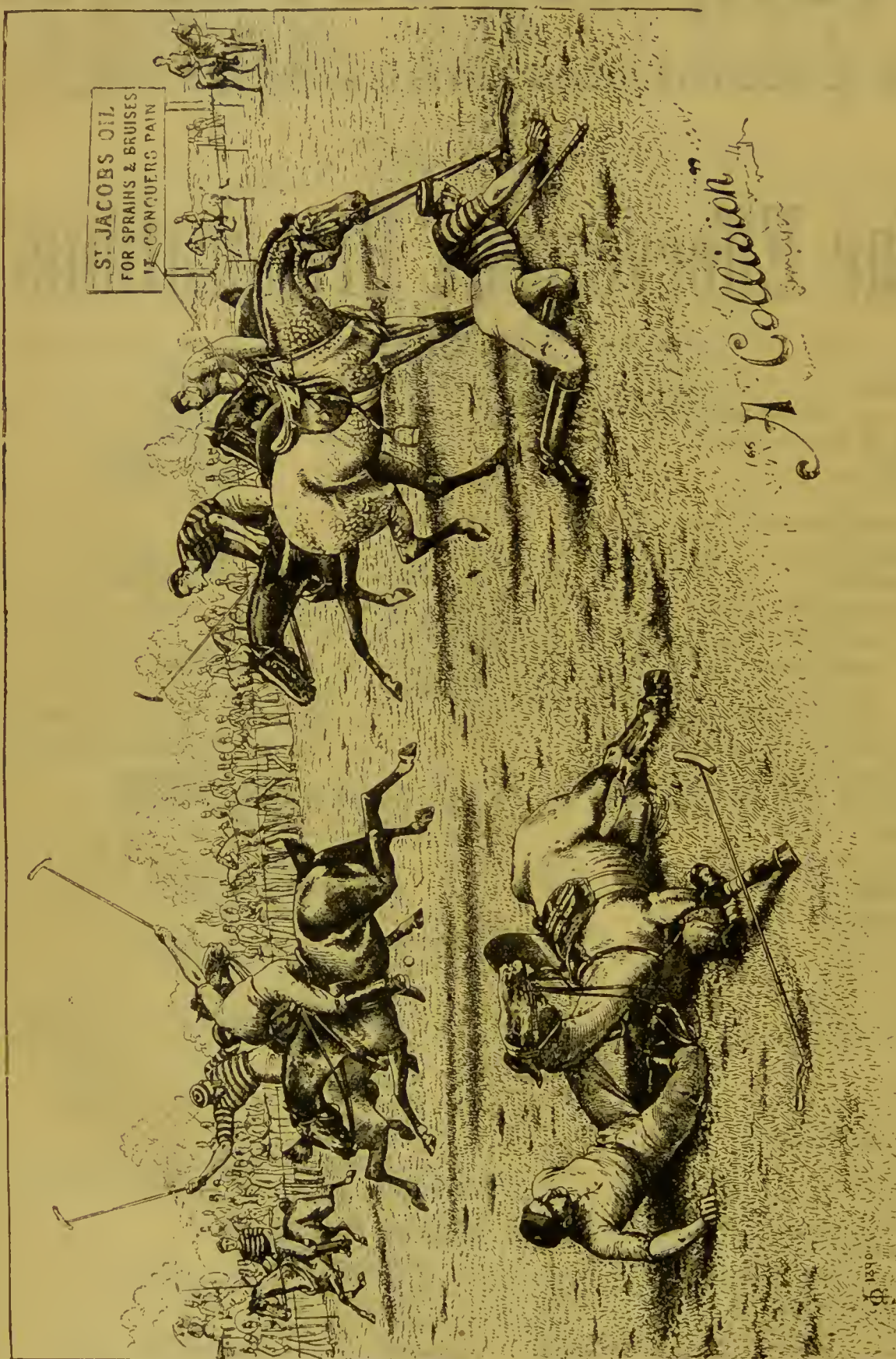
OFFER THE UNDERMENTIONED

Granular Effervescent Preparations.

Ammonium Bromide
 " " and Iron Citrate
 Antipyrin, gr. v. in one tea-spoonful
 Antifebrin, gr. v. " "
 " gr. x. " "
 Bismuth, Ammonio-Citrate and Iron Citrate
 Bismuth and Iron Citrate
 " and Pepsine
 " Pepsine and Iron Citrate
 " " and Strychnine
 " " and Quinine
 " " and Bromide of Potassium
 " " Iron and Strychnine
 Caffeine Citrate, gr. ii. in one tea-spoonful
 " Hydrobromate, gr. ii. in one tea-spoonful
 Carlsbad Salts
 Cheltenham Salts
 Cocaine Hydrochlorate
 Friedrichshall Salts
 Iron Ammonio-Citrate
 " Bromide
 " Carbonate
 " Citrate
 " Iodate
 " Iodide
 " Phosphate
 " and Arsenic
 " and Magnesia Sulphate
 Kissingen Salts
 Kreuznach Salts
 Leamington Salts
 Lime Hypophosphite
 " " and Pepsine
 " and Soda Hypophosphite
 Lithia Carbonate
 " Citrate
 " " and Potash
 " Salicylate
 Marienbad Salts
 Nux Vomica

Potash Benzoate
 " Bicarbonate
 " Bromide
 " Chlorate
 " Citrate
 " Iodide
 " Nitrate
 Phenacetin, gr. v. in one tea-spoonful
 Pullna Salts
 Quinine Citrate
 " " and Strychnia
 " " and Iron
 " " Iron and Bromide of Potassium
 " " Iodide of Potassium
 " " Strychnia
 " " and Iron Phosphate
 " Iodate
 " Salicylate
 " and Caffeine Salicylate
 Seidlitz Mixture
 Seltzer Salts
 Soda Citro-Tartrate
 " Hypophosphite
 " Iodide
 " Nitrate
 " Phosphate
 " Salicylate
 " Sulphate
 " and Magnesia Sulphate
 Vichy Salts
 Magnes. Cit., Gran.—
 Extra quality
 Fine "
 2nd "
 FRUIT FLAVOURED CITRATES—
 Raspberry
 Strawberry
 Lemon
 Lime Fruit

Our Show Cards and other Novelties, including Panel Transparencies, will be found useful and attractive, and will increase the sale of ST. JACOBS OIL.



THE above Picture, size $17\frac{1}{2}$ inches by 22 inches, from the original pen-and-ink drawing by our own special artist, Lieut.-Colonel Marshman, will be sent to any part of the world, post free, on receipt of 3d. For 6d. we will send with the above either of our celebrated pictures, same size and by the same artist, "Our Road Coach," "An Accident on Escort Duty," "Autumn Manoeuvres—The Royal Horse Artillery," and "Bolted over the Ropes." For 9d. we will send any three of the above; and for 1s., the set of five complete, securely packed in a cylindrical tube. The above pictures are beautifully printed on heavy calendered paper, suitable for framing or portfolio. These pictures, equal to artists' proofs, form one of the grandest groups of bold and original designs ever published, and should be in the possession of every home, hotel, and club. Address—The Proprietors of St. Jacobs Oil, 45 Farringdon Road, London, E.C.

We are sending out to Chemists 56 different Designs in Counter Wrappers, sizes 8 oz., 6 oz., and 4 oz., Printed on a Heavy, Fine-finished, White Paper, on one side only, with wide margins. Carriage Paid.

A Copy of this Supplement is inserted in every number issued of "The Chemist & Druggist."

The Chemist and Druggist

SUPPLEMENT

Businesses Wanted.
Businesses for Disposal.
Premises to Let.
Auction Sales.

SATURDAY, OCT. 18, 1890.

Partnerships.
Situations Vacant.
Situations Wanted.
Miscellaneous.

CHEMISTS' TRANSFERS.

MESSRS. ORRIDGE & CO., 32 LUDGATE HILL, E.C.

CHEMISTS' TRANSFER AGENTS,

May be consulted at their Offices on matters of SALE, PURCHASE, and VALUATION.

The business conducted by Messrs. Orridge & Co. has been known as a Transfer Agency since the year 1843, and is well known to all the leading firms in the Trade. VENDORS have the advantage of obtaining an opinion on value derived from extensive experience, and are in most cases enabled to avoid an infinity of trouble by making a selection from a list of applicants for purchase, with the view of submitting confidential particulars to those alone who are most likely to possess business qualifications and adequate means for investment. PURCHASERS who desire early information regarding eligible opportunities for entering business will greatly facilitate their object by describing clearly the class of connection they wish to obtain.

1.—LONDON, N.—Dispensing and Retail Business of good class; returns about £950 yearly; nearly all cash; shop very nicely fitted and good stock; good house and private entrance; about £900 required.

2.—LONDON CITY.—Retail and Dispensing; old-established concern; returns nearly £500 yearly; capital position for a pushing business; price about £150; full investigation.

3.—LONDON.—Central position; Dispensing and Retail, with good proprietary trade, all ready money; returns nearly £600; very good profits; handsomely-fitted shop and good stock; price about £300; worth immediate attention.

4.—LONDON.—Very busy middle-class thoroughfare; old-established Retail and Dispensing, with wine agency; returns £1,450 yearly, with good profits; well-fitted commodious shop and good stock; price £500 cash to an immediate purchaser; full investigation permitted.

5.—LONDON, N.W.—Retail and Dispensing Business; very good class; returns £500 yearly; single-fronted handsome shop and good stock; 6-roomed house and garden; price required £400.

6.—LONDON SUBURB, S.E.—Good Middle-class Business; established 5 years; conducted by assistant; returns £375; easily increased by a principal; well-fitted shop and good stock; comfortable house; price about £350; part may remain if wished.

7.—PROVINCIAL TOWN.—Seaport.—Wholesale and Retail Business of high-class; annual return £5,500; particulars furnished only to gentlemen sending a London reference and prepared to invest about £4,000.

8.—INLAND WATERING PLACE.—First class Business for disposal; returns nearly £1,200 yearly; profits large; handsome shop and good stock; situation first-rate; about £1,450 required.

9.—KENT.—Good class Retail and Dispensing, situated in a large town; commanding shop; returns £700 yearly; good house; rent easy; held on lease. Price £500.

10.—KENT.—Large town.—Old-established Business, held by the vendor between nine and ten years; returns between £300 and £900 yearly; large sale for own proprietary articles; good house, private entrance, garden, &c.; price about £750.

11.—SEASIDE (South).—Favourite, watering place.—Handsome Pharmacy; well situated for business; returns about £1,600 yearly; very profitable; to an immediate purchaser special advantages will be offered, vendor having purchased London business; about £1,600 required.

12.—EASTERN COUNTY.—Mixed Wholesale and Retail Agricultural trade; returns about £2,000 yearly; good business premises, held at low rental on long lease; valuation of stock and fixtures, with nominal premium only.

13.—NEAR LONDON.—Agricultural Retail, with Dispensing; very old-established concern; returns about £2,000 yearly; several good proprietary veterinary preparations included in sale; large and well-fitted shop, and good house with large garden; about £1,200 required, or valuation if required.

14.—SOUTH COAST.—Winter resort.—Handsome corner shop; good class Dispensing and Retail; returns between £1,300 and £1,400 yearly; particulars on application; about £1,100 required.

Particulars of any of the above will be furnished on application.

N.B.—NO CHARGE TO PURCHASERS.

Other Businesses, Town and Country; particulars free on application. Personal applicants receive Messrs. O. & Co.'s direct attention and advice, where required, free.

TERMS FOR VALUATION ON APPLICATION. APPOINTMENTS BY POST OR WIRE HAVE IMMEDIATE ATTENTION.

Messrs. ORRIDGE & Co. invite communications from COLONIAL and FOREIGN firms where business of a confidential nature requires the especial attention of a London agent.

SPECIAL NOTICE.—TO PRINCIPALS AND ASSISTANTS.

MESSRS. ORRIDGE & Co. Register Vacancies for Situations FREE OF CHARGE.

ORRIDGE & CO., 32 Ludgate Hill, LONDON, E.C.

PARTNERSHIP.

GENTLEMAN, with long and varied experience, qualified Chemist and Dentist (surgical and mechanical), wants share in good business on Tyneside. Address, in first instance, with brief particulars, 205/33, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

PARTNERSHIP is offered in a first-class Retail and Dispensing trade, in fashionable town, with easy terms for succession, or vendor will sell outright; net profit £500; price £1,400, or £700 for half-share. Inquiries must be accompanied with references, to F. J. Brett, Valuer, 60 St. Stephen's Road, Leicester.

TO LET.

CHEMIST'S shop (old-established), with possession, to let; rent £32; situate at 418 Old Ford Road; good opening for branch or wholesale; key next door. 235/32, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

TO Chemists and Druggists.—The excellent House and Shop, 11 Moor Lane, Great Crosby, near Liverpool; the shop is well fitted-up, and all the fixtures belong to the landlord. Apply to T. May Smith, Fern Lea, Kensington, Liverpool.

FOR SALE.

£60.—The well-manufactured fittings of a small Chemist's Shop in Staffordshire. G. K., c/o W. Sutton & Co., 76 Chiswell Street, London.

CHEMICAL Manufacturers, Export Merchants, and others.—For Sale, from 1,000 to 2,000 cast-off brewers' barrels, good and sound; will dispose of them cheap.—For further particulars apply by letter to Burman & Son, Hawkins Lane, Burton-on-Trent.

APPRENTICESHIPS.

APPRENTICE wanted for Retail Drug business. Apply, J. H. Parker, Chemist, Middleton, Lancs.

APPRENTICE.—Required, in a good class Retail and Dispensing business, a well-educated youth as Apprentice; comfortable home and every facility for acquiring a good practical knowledge; time and assistance in studies; must have passed Preliminary or equivalent. Apply, N. G. Beck, Chemist, Burgess Hill, Sussex.

WANTED, a well-educated youth as Apprentice; preference given to one who has passed the Preliminary, or its recognised equivalent; every facility would be given for acquiring a thorough practical knowledge of the business; personal guidance in studies would be given; moderate premium required. Apply, W. S. Blinkhorn, Chemist, Salisbury.

F. J. BRETT,
VALUER, LEICESTER,

60 St. Stephen's Road.

References to principal London and Provincial Wholesale Houses, also to numerous clients throughout the United Kingdom.

BUSINESSES THOROUGHLY INVESTIGATED FOR BUYERS. 20 YEARS' EXPERIENCE.**KENT.**—£850 returns; Good-class Retail, with own specialities; rent £42; lease; price £700.**MIDLANDS.**—£1100; General Retail; market town; price £650.**LIVERPOOL SUBURB.**—£1,500 returns; first-class Retail, with two agencies; price £1000.**GLOUCESTERSHIRE.**—£800; light Retail; pleasant town; rent £40; price £650.**WILTS.**—£500; Light Retail; good house, large garden; price £350.**LANCASHIRE.**—Partnership.—Owner has two businesses in growing part; returns £800; will accept partner with £250; good chance.**BUSINESSES FOR DISPOSAL.**

3s. 6d. for fifty words; 6d. for every 10 words beyond.

IMMEDIATE disposal, in North Wales, good-class Light Retail, Dispensing, and Prescribing Business, in main thoroughfare; shop neatly fitted and well stocked; satisfactory reasons for disposal. Apply, Hughes, Cross Street, Holywell.**A**N unusually good opportunity occurs for a thoroughly qualified man to secure a Business, at small outlay, situate in a good market town in Kent. Apply, personally, any day between 10 and 1, W. W. Flood & Co., 206 and 208 Borough High Street, S.E.**SHROPSHIRE.**—An old-established Light Retail and Prescribing Business; country town; returning over £300; capable of increase; good house and garden; rent and taxes low; good opening for dentistry; every investigation. 195/20, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.**BIRMINGHAM** Suburbs, in thickly populated part, a genuine Prescribing and Light Retail, returning £400, with good profits; good prices, and no patents; vendor attending medical school cannot give attention; this is a good opening, as there is much scope for increase. "Medicus," Wyleys & Co., Coventry.**£2,000 RETURNS.**—Good medium-class Business in large healthy town; present returns can be largely augmented by energetic man; patents at store prices. Applicants with references can have full details by applying to "Radix," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.**YORKSHIRE.**—On account of health, an old established Light Chemist's Business, in one of the principal towns; well adapted for two young people; neat shop; well arranged house; sold for valuation. Full particulars upon giving a London reference to "Health," care of Messrs. Hodgkinsons, 101 Whitecross Street, London.**LONDON** (Suburb).—Good-class Retail and Dispensing Business; returning £900, and clearing £350 yearly net profit; large well-fitted stocked shop, in main thoroughfare; capable of much increase; selling through death; price £800; every investigation to principals only. "Kola," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.**£180.**—For disposal, a genuine Retail and Dispensing Business, in a good rising London suburb; no opposition; returns increasing; an exceptional opportunity; stock and fixtures worth the money; satisfactory reasons for leaving. For further particulars, apply to "Olodia," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.**NORTH STAFFORDSHIRE.**—Healthy manufacturing town; commanding old-established corner, in main street; good house and warehouse accommodation; returns over £920 with poor attention; good prices; vendor, giving up trade, will accept £350 cash; week's trial if desired; please enclose references. "Obemikt," care of Mrs. Roaks, 67 Newcastle Street, Hulme, Manchester.**I**N small Midland town: Light Retail and Prescribing Business; returns nearly £400; increasing each year; hardly any booking trade; good house at low rental; large garden; totally unopposed; Dentistry covers rent; every investigation; anyone desiring a good country business will find this a good opportunity; no agents need apply. A. Norton, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.**BUSINESSES WANTED.****WANTED** to purchase a Chemist's Business in the Southern part of London. O. S., 55 Hatcham Park Road, New Cross, S.E.**GOOD-CLASS** Retail and Dispensing Business, in London or the Provinces; returning £800 to £1,200; strict investigation required, and full value will be paid for a genuine concern. Address, W. W. O., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.**A** GENUINE Chemist's Business, suburban or provincial, yielding a net profit of not less than £300 per annum; preference given where advertiser could go as assistant for six months; cash ready; references good. "Aqua," Maw & Co., Aldersgate Street, E.C.**Mr. G. B. CROCKER,**
Trade Valuer, Transfer Agent, & Accountant,
15 WALBROOK, E.C.**NORTH OF ENGLAND.**—Good-class Business, in pleasant town; returns £1,400; price £1,200; very handsome pharmacy and first-class residence.**HOME COUNTY.**—Good-class Family and Dispensing trade; returns £700; price £600, or valuation of stock and fixtures; low rent.**GLOUCESTERSHIRE.**—Retail and Dispensing; returns £800; very low rent; price £700; handsome pharmacy; best position in the town.**WEST OF ENGLAND** (Cathedral City).—Retail, Dispensing, and Prescribing; returns £500; price £450; handsome pharmacy, and excellent prospects.**MIDLANDS.**—Mixed Retail, Dispensing, and Prescribing; returns £1,100; price £700, or valuation of stock and fixtures.**LONDON, N.**—Retail and Dispensing; under very indifferent management doing £10 weekly; price £275; good house, and very low rent.**LONDON, N.W.**—Good-class Retail and Dispensing, in main road; returns £600; price £500; open to offer; part may remain.**LONDON, W.**—Very profitable Dispensing, and Prescribing trade, in select suburb; returns £600; price £450; good investment.

Valuations for Probate or Transfer conducted in any part of the United Kingdom. Terms on application.

MESSRS. BERDOE & CO.**CHEMISTS' TRANSFER AGENTS & VALUERS,****30 JEWRY STREET, ALDGATE, E.C.**

Established 1870.

VENDORS will find our Offices a quick medium for the Sale of genuine Businesses. Strict confidence guaranteed. Several good-class Businesses wanted, returning £700 to £1,500. Town or country. **PURCHASERS** are invited to apply (stating their requirements) for particulars of businesses, sent free on application.**NO CHARGE TO PURCHASERS****YORKSHIRE.**—Best position in important market town; Retail and Dispensing Business, returning £1,050; net profit £400; same hands 24 years; rent £40; price £800, or offer; good introduction given.**LINCOLNSHIRE.**—Retail, Prescribing, and Agricultural; returns £1,000, besides a valuable agency; net profit £300; same hands many years; good house and warehouse; good reasons for selling; price £700.**ESSEX.**—Unopposed Retail and Prescribing; returns £530; nothing heavy; rent £20; good house, well-stocked garden; owner, taking larger business, will accept the low sum of £250.**BUCKS.**—Unopposed Village Business; returns £900; full prices obtained for everything; low rent; good house, garden, greenhouse; same hands 24 years; retiring; price only £450.**WARWICKSHIRE.**—Retail and Prescribing trade; same hands 21 years; returns £400; net profits £150; rent £24; good house and garden; well-fitted and stocked shop; price £175.**NOTTINGHAM** (suburb).—Retail and Prescribing Business; returns £6 weekly; should be doubled; corner shop, well fitted and stocked; rent £25; price £150, or valuation; formerly did £600.**OXFORD.**—Retail and Dispensing Business; returns £400, steadily increasing; changed hands once in 50 years; large, well-fitted shop, well stocked; good house; price £300, or offer.**LINCOLNSHIRE.**—Unopposed Retail and Prescribing trade; returns £7 weekly; rent £15; good house, large garden; taking larger trade; price £160; net profit £130.**HOME COUNTY.**—Unopposed Retail and Prescribing Business; returns £4 weekly under bad management; rent £18; good house, large garden; population 2,000; price £120, or valuation.

Other Businesses, town and country, from £100 to £5,000. Particulars forwarded free on application.

Terms for Sale and Valuation on application.

Messrs. Berdoe & Co., 30 Jewry St., Aldgate, London, E.C.**SITUATIONS OPEN.**

3s. 6d. for fifty words; 6d. for every 10 words beyond.

JUNIOR or Improver wanted, at once; time for study. Sutherland, Chemist, Totnes.**ASSISTANT** (Indoors), accustomed to good-class business. Full particulars, with carte, to John Bates, Chemist, Leicester.**ASSISTANT**, with good experience, for good-class mixed Retail and Dispensing business. State full particulars to C. B. Shuker, Plympton.**WANTED.** Assistant (unqualified, indoors) accustomed to good-class business; apply with references and photo, Steward & Westover, Kidderminster.**A** YOUNG man wanted as Indoor Assistant in an open surgery; ample time for study; call before 11, or after 7 P.M. H. H., 64 Great Portland Street, W.

WANTED. Dispenser (outdoors); daily from 1.30 to 2.30, 5.30 to 9.30; Sundays 2 to 3; terms 15s. 6d. weekly. Dr., 101 Northgate Road, Clapham Junction, S.W.

WANTED, at once, a Junior for a Country business; in town. Apply, sending carte, with age, reference, and salary, to Mr. Walker, Chemist, Royston, Herts.

SYDNEY, Australia.—Wanted, a steady, reliable honest Assistant, early next year; married or single; liberal and progressive salary. Patten-on, 17 Falsgrave Road, Scarborough.

A n active man, to take full charge of a warehouse for the manufacture of Miscellaneous Drugs, &c. Apply, stating salary required, with references, to R. Corker, West Hill, Rotherham.

DRUGGISTS' SUNDRIES.—Wanted, a quick, active young man, about 18 years of age, with good practical experience in Druggists' Sundries trade. Apply at 30 St. Mary Axe, E.C.

TRAVELLER.—Well-educated smart young Pharmacist, to call on Chemists and Medical Men; good salary to competent man. "Energy," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

JUNIOR Invoice Clerk, by a firm of Drug Merchants; opportunity for promotion. Address, with full particulars and references, "Cocaine," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

J. C. POTTAGE, Homœopathic Chemist, 117 Prince's Street, Edinburgh, is in want of an active and obliging Assistant (outdoors); a knowledge of homœopathy not essential; state salary; enclose photograph and references.

JUNIOR Assistant; one who has just completed his apprenticeship in a light Retail and Dispensing Business preferred. State salary required, indoors or outdoors, and full particulars, to G. Briggs, 221 Woodhouse Lane, Leeds.

H. S. PEARMUND, Pharmacist, Hereford, requires the services of an Indoor Assistant; energetic, and accustomed to good Country Business; moderate salary. Apply, stating age, height, references, salary required, and enclose photo (returnable).

WANTED, a reliable Assistant (outdoors); one seeking a permanency in a light class business preferred; applications entertained replied to within three days. Particulars of salary, last engagements, &c., to J. Griffiths Richards, Chemist, Hastings.

TO DISPENSERS.—Wanted, an energetic young A.P.S., well up in Dispensing, to manage this department; outdoors; salary progressive, commencing with £100. Address, "Dispensing," care of Messrs. Leah & Willdey, Ethel Street, Birmingham.

WANTED, in a Mixed business, a thoroughly trustworthy and experienced Assistant; outdoors; good dispenser and counterman; must have good references; state age, height, and salary required. Apply to J. P. Hewitt, 66 Division Street, Sheffield.

A RELIABLE Junior, accustomed to General Business, with Dispensing, Counter, Prescribing, &c.; must be a safe Dispenser, energetic and obliging, with good address. Particulars, with photo, if convenient, to Randal How, Chemist and Dentist, Oxford.

WANTED immediately, a trustworthy Junior, of good appearance and agreeable manners; indoors; accustomed to Country business. Apply, stating age, height, salary, and reference (and photo if convenient) to Thomas Brown, Pharmaceutical Chemist, Lutterworth.

SENIOR wanted; must be an able Prescriber, good Salesman and Extractor; age not under 35; liberal salary and permanency offered to a good business man. Apply, giving full particulars of past experience, stating when disengaged, &c., to Mr. Hagon, Chemist, Cardiff.

WANTED, Manager, about 30 (qualified); must be reliable, energetic, obliging, and a good prescriber; a permanency to a suitable person. Apply, stating age, height, and salary required, with photo, to J. & J. Thompson & Co., Ltd., 192 Manchester Street, Oldham.

WANTED, an Assistant, in a private surgery, to dispense and keep the books, &c.; a Chemist preferred; age about 23; salary, indoors, £35 to £40. Apply, personally if possible, before 11 or after 6, 60 Cambridge Gardens, Tadbrooke Grove Road, W. Applications not answered in three days declined.

JUNIOR, about 22, with Minor qualification; must be thoroughly steady and trustworthy, well up in dispensing, and accustomed to high-class business; abstainer. Address, with full particulars as to age, height, salary required, experience, and references, enclosing carte, to Mr. Vizer, 154 Marine Parade, Brighton.

RELIABLE Junior or Improver, for easy berth; capable of taking charge occasionally; very desirable for those requiring time for study and recreation; knowledge of Teeth Extracting and Prescribing preferred. State where last employed, age, salary out and in doors, to Pearson & Co., 10 Caroline Street, Cardiff.

ASSISTANT (outdoors); Minor qualification, good Dispenser and Salesman; tooth extractor preferred; comfortable permanency; two kept; hours 8 to 8; one evening off weekly. Full particulars giving references, stating salary required, when disengaged, and enclosing photo (to be returned), Cowan, Chemist, Star Hill, R. Chester.

WANTED, an outdoor Assistant, in good English, steady and reference; not under 23 years of age. Padwick Redhill.

IMMEDIATELY, an Assistant, married, for Mixed business, with post office. State age, references, Potts, Ilkeston.

A SSISTANT wanted, in good Retail and Dispensing Business; must be steady and reliable. Gibson, 16 Whitefriargate, Hull.

IMPROVER or Junior (outdoors) in a good-class business, carte and usual particulars to G. S. Simpkins, 75 High Street, Stourbridge.

WANTED, qualified Assistant, outdoors, for central branch. Apply, stating salary required, enclosing photo, to D. W. Bardill, Chemist, Derby.

WANTED. Assistant Chemist and Druggist for an establishment in Bombay. Apply, stating age, &c., P. Harrower, 134 Bath Street, Glasgow.

A QUALIFIED Junior, accustomed to a high-class trade, with good address and business capacity. Enclose photo and give particulars, to Mr. Lester, Chemist, Cork.

A QUALIFIED Assistant (outdoors), with good experience and address. Particulars, with carte if possible, The South-Eastern Drug Company, Folkestone.

WANTED. a competent and quick Junior hand for the Wet Counter. Apply, stating experience, salary wanted, &c., to R. Sumner & Co., Wholesale Druggists, Liverpool.

JUNIOR or Improver wanted for light Retail Business; time for reading; state age, height, references, salary required, and when disengaged. "Chemist," 76 Lozells Road, Birmingham.

WANTED. immediately, a Junior or Improver in a good-class Mixed Retail and Dispensing Business. Apply, stating full particulars, A. H. Adams, 21 Formosa Street, Malda Vale, London, W.

IMMEDIATELY, qualified Assistant, in house; accustomed to best class of business, especially Dispensing; good personal character indispensable; salary first year £50; state age, height, references, Randall & Son, Southampton.

IMMEDIATELY.—An Assistant, about 22 years of age, accustomed to a good country business. Apply, stating age, height, experience, salary required, references, and enclosing carte (which will be returned); an abstainer preferred. J. L. Davies, Chemist, Hay.

A COMPETENT Assistant for light Retail and Dispensing; indoors; only one employed; must be a thoroughly reliable Dispenser and of good address; state age, qualification, references, when disengaged, and salary required. O. W. Reed, 190 High Street, Lewisham, London, S.E.

S.W.—Wanted, a qualified Junior for Light Retail and Dispensing Business; one afternoon and evening in the week, and Sunday off. Apply, first by letter, stating full particulars and salary required, to O. M., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

IMPROVER, or Junior, for a Dispensing and Family Business in the Midlands. Please state age, length of experience, class of business accustomed to, when disengaged, salary required, &c., and enclose photo (to be returned), R. S. L., Messrs. Hearon, Squire & Francis, 33 Southwark Street, London.

WANTED, competent Assistant (24 to 30); single; able to take charge in occasional absence of proprietor; good-class Dispensing, Prescribing, and Family Retail; Eastern Counties town; junior and apprentice kept; permanency. Apply, stating age, height, salary in or out doors, photo, "Vinolia," Hearon, Squire, 38 Southwark Street, London, S.E.

COMPETENT Laboratory Assistant required by a provincial wholesale; must be able to superintend a steam laboratory and manufacture pharmaceutical preparations and confectionery essences; would also be required to help put up surgeons' orders, &c. Apply, stating experience, age, salary required and enclose carte, to N. Y. Z., care of Messrs. Lynch & Co., Aldersgate Street.

WANTED, an Assistant for Japan; unmarried; engagement for five years; must be a thorough good business man, have the Minor qualification, speak French fluently, and be able to attend to books; board and lodging provided, and second-class passage out in one of the P. and O. steamers; unexceptionable references are required. For further particulars, apply to S. Maw, Son & Thompson, 7 to 12 Aldersgate Street, London.

TO DISPENSERS.—Required, for the Prison Service, Compounders of Medicines; candidates must hold a Diploma of the Pharmaceutical Society; age 24 to 30; salary £120 per annum, rising by £2 per annum to £140, with uniform, medical attendance, and medicines. Personal application, with satisfactory testimonials of recent date from responsible persons, should be made to the Governor of the nearest prison, who will furnish information as to the nature of the duties, &c. Candidates residing in or near London should apply to the Governor of H.M. Prison, Wandsworth. No travelling or other expenses will be allowed. No person whose health, character, and past career will not bear the most rigid investigation need apply.

SITUATIONS WANTED.

1s. for twelve words; 6d. for every six words beyond.

- AS DISPENSER** to doctor. Address, F., 149 Mile End Road, E.
- ASSISTANT**: Minor; South Coast preferred. W. W., 103 Massina Avenue, N.W.
- ASSISTANT**: time for study; good experience; aged 25. J. R. W., 125 Hampstead Road.
- JUNIOR**: 4 years' experience; abstainer; good references. Neal, 1 Kemble Road, Croydon.
- JUNIOR** or Improver; 3 years' experience; passed Prelim. Tomson, Vernon House, St. Neots.
- EVENING** engagement desired. Address "Chemists," Westminster College, Trinity Square, S.E.
- TEMPORARY**, or Manager, by Qualified Chemist; small salary. A. G., Mr. Osborne, Berkeley.
- JUNIOR** or Improver; 5 years' experience; Birmingham or neighbourhood. Smith, Chemist Pershore.
- ASSISTANT**, aged 21 (no stores); can prescribe. "Extractor," 195 High Road, Kilburn, N.W.
- AS Assistant &c.**, for evenings after 7 P.M., Saturdays 3 P.M. "Minor," 7 Silcote Road, Albany Road, S.E.
- LOCUM-TENENS**, Manager, or one day per week; 45; qualified; references. Williams, 70 Ledbury Road, W.
- ASSISTANT**, or Dispenser to surgeon; aged 25; outdoors; varied experience. G. Micbell, Ridgeway, Plympton.
- AS ASSISTANT**: time for reading; experienced; aged 26; good references. G. W. S., 178 Ball's Pond Road, N.
- MANAGER**; Irish qualification; experienced; married; good references. "Chemist," 5 Waterloo Terrace, Cork.
- ASSISTANT** (outdoors); 23; excellent references; Major qualification. Woodruff, Westleigh, Obcadle Heath, Stockport.
- SURGEON'S** Dispenser, or part time Assistant; London; outdoors; aged 24; good references. H. Lemon, 31 Stanmore Street, N.
- EXPERIENCED** Dispenser; 26; disengaged half of the week. "Beta," Office of THE CHEMIST AND DRUGGIST, 42 Cannon St., E.C.
- ASSISTANT** or Branch: qualified; can Prescribe and Extract Teeth; aged 28. Address, "Minor," 30 Rutland Street, Hampstead Road, N.W.
- ASSISTANT**; Cape or Australia; aged 26; good-class experience; good references. W., care of Mr. Marshall Leigh, Pharmacist, Brighton.
- ASSISTANT**, Dispenser, or Counterman; 6 years' experience; Kent preferred; disengaged about end November. "Spes," 2 High Street, Crayford, S.E.
- WHOLESALE**.—An experienced Pharmacist desires an appointment as Chemist; now disengaged. S. A. I., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.
- DISPENSER**: public institution preferred; outdoors; aged 35; married; highest references. "Statim," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.
- WHOLESALE**.—Assistant; disengaged; 8 years' experience with City firm at the Dry, Wet, Export, Cheeking, Warehouse and Finishing Counters; excellent references; aged 36; single. "Export," 156 Great Dover Street, Borough.
- CHEMISTRY** and Horticulture.—A Gentleman (38) with a practical knowledge of the above, combined with business experience and the control of men, seeks a post in England or abroad, where his services would meet with a fair remuneration. E., Ford House, Exeter.
- TRAVELLERSHIP**.—Gentleman, educated, *au courant* with medical matters and accustomed to doctors (3 years' medical work), desires post; willing to go into offices for Preliminary training; pleasant address, good conversational powers, business-like, energetic, good correspondent; references. Thompson, 58 West Ham Lane, Stratford, London, E.
- WHOLESALE DRUG TRADE**.—Situation wanted by an English gentleman, aged 23, who has had two situations of trust in the drug trade, and who thoroughly understands drugs and chemicals, and in his last place was entrusted with buying; he can speak and correspond (commercially) in German; he can produce first-class personal references in the drug trade. Apply by letter, to E. J., care of T. Christy & Co., 25 Lime Street, London.

- DISPENSER**, for spare time. R. H., 7 Queensbury Street, Essex Road, N.
- ASSISTANT**, in London; aged 24; Major; good references. Carman, 436 New Cross Road.
- IMPROVER**: 18; abstainer; good character. "Preceptors," Medical Hall, Nailsea, Somerset.
- ASSISTANT**: aged 28; time for study. "Chemists," Triangle Hotel, Charterhouse Square, E.C.
- LOCUM-TENENS**, or Manager; qualified; experienced; references. H., 90 Great Thornton Street, Nail.
- ASSISTANT**; aged 24; married; disengaged. "Chemists," 17 Ramsden Terrace, Wintoun Street, Leeds.
- RE-ENGAGEMENT**: Patent Medicine department; aged 27. R., 27 Lower Talbot Street, Nottingham.
- AS Dispenser** to a Surgeon, or to manage Retail; London or suburbs preferred. "Sigma," 33 Chancery Lane, London.
- JUNIOR** (19); 5 ft. 10 in.; good experience and references. "Chemists," c/o Roberts, Chemist, Ellesmere Port, near Chester.
- MANAGER**, temporary, or permanent; abstainer; experienced. "Veritas," 10 Bond Street, Higher Broughton, Manchester.
- WHOLESALE**.—Wet Counter, in London; highest references. 159.22, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.
- ASSISTANT**; good Dispenser; first class London experience; outdoors; aged 24; disengaged. C., 124 Pictory Park Terrace, Kilburn.
- ASSISTANT**, 7 years' experience; aged 23; salary £30; London preferred; good dispenser. "Statim," 27 Lincoln Road, Horn-castle.
- EVENING** engagement wanted; disengaged after 7.30 P.M.; aged 28; competent. "Evening," care of Mellin & Co., Chemist, Piccadilly Circus, London.
- H. BRAMPTON**, Chemist, Sudbury, Suffolk, wishes to recommend his late Apprentice as Junior in a good Mixed Country trade, with time for study.
- AS Junior**, in a good Retail and Dispensing Business; aged 21; 5 years' experience; height 5 ft. 8 in.; disengaged; please state time. Hugh Roberts, Glanadda, Bangor.
- MANAGER**; country preferred; qualified; good abilities; married; abstainer; steady, trustworthy; disengaged; good references. "Speriamo," 25 Tolmers Square, N.W.
- ASSISTANT**, with good general knowledge; 19 years' experience; aged 36; height 5 ft. 10 in.; unqualified; 10 years in last situation; good extractor. "Dens," 445 Oxford Road, Reading.
- ASSISTANT**: good experience; will be disengaged 25th of this month; have been over seven years in one house; character will bear strictest investigation. Address, W. B., 129 High Street, Guildford.
- AS Manager** of Branch, with view to purchase; sea side business entertained; qualified; experienced; good Prescriber and Extractor; can introduce very saleable Proprietaries. Address, "Cycle," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

MISCELLANEOUS.

- ACCUMULATION** of travellers' samples, consisting of trusses, suspensory bandages, chest-expanding braces, belts, &c., to be cleared as job lines; to any druggist doing a quick and cheap trade would be great bargain; to be seen by appointment only. Vincent Wood, 3 St. Andrew's Street, Holborn Circus, E.C.
- FOR** Disposal, valuable established Proprietary Article; very profitable having a nice sale in all parts of England through chemists. Title, trade-mark, and all rights fully secured; merely wants a little attention to develop into a big thing; owners, a firm of wholesale druggists, are too much engaged to do justice to it, hence this advertisement; particulars of sales, &c., given to principals only; price about £100 inclusive; owners prepared to take a good quantity yearly. Apply to Pynar, care of Horuers & Sons, Mitre Square, Aldgate, London.
- PRELIMINARY AND MINOR**.
- ALL** Students who are preparing should send for particulars of a method of study which will enable them to pass with ease. Enclosed stamped envelope to Mr. J. Tully (Hill's prizeman), Chemist, Hastings. Established 1872. References to past and present Pupils. Student's Herbarium, 100 specimens, 7s. 6d., post free.
- STUDENTS' AIDS TO EXAMINATION**.
- PRELIMINARY**.—Arithmetic and Metric System, 1s. How to Write an Essay, 3d. Caesar Simplified, 1s. Knotty Points in Latin Grammar, 1s. 6d. MINOR.—Equations Simplified, 1s. Illegible Autographic Prescriptions, 1s. Notes on Dispensing, 1s. Prescriptions given at the Minor, 6d. "Chemist," care of Mr. J. Edwards, Wye, Kent.

SOLUBLE

“TABLOIDS.”

THE first “Tabloids” we introduced into this country were used chiefly for throat affections, &c., and were purposely compressed hard in order that they might dissolve slowly, giving the advantages of a concentrated solution of the drug acting continuously upon the diseased surfaces. The fact of these “Tabloids” being so hard has led many to believe that “Tabloids” were unsuitable for administering medicines when prompt solution or disintegration was required. This, however, is an error, because the solubility or disintegration of the drug depends very much upon the force of compression. Our “Tabloids” of Chlorate of Potash and the Voice “Tabloids” are compressed so hard that one of them will take an hour or more to dissolve upon the tongue, whereas the “Tabloids” of Quinine, Salol, Antipyrin, Phenacetin, Sulphonal, Compound Sulphur, and many others, constitute the most soluble form of the drug next to an actual solution. This fact can be readily tested by placing one of these “Tabloids” upon the tongue, and we shall be pleased to supply specimens to any medical men or chemists desiring to make the experiment. Recent improvements in our machinery enable us to regulate the pressure with the greatest nicety; every batch of “Tabloids” is now tested before being bottled, and we are prepared to guarantee that all “Tabloids” of compressed drugs intended to be swallowed for prompt constitutional effect will dissolve or disintegrate promptly. The Quinine “Tabloids” are more soluble than ordinary Quinine Pills, as they are to a certain extent porous, not being made with a soft excipient, but by compressing the dry drug. Although Sulphonal and Salol themselves are insoluble in the saliva, the “Tabloids” fall to pieces on the tongue in a few minutes. The Antipyrin “Tabloids” are quite soluble, and are the most eligible form for administering the drug, because the bulk is more agreeably swallowed in the “Tabloid” form than in any other. The solubility and activity of “Tabloids” of Cascara Sagrada, Compound Cathartic, Laxative Vegetable, &c., are so generally well known among the medical profession as not to require any comment on our part. “Tabloids” may be taken easily and quickly by being placed upon the tongue and swallowed with a draught of water or other liquid. If the drug has any disagreeable taste it can hardly be noticed. For very fastidious patients the disagreeable taste can be entirely covered by enveloping the “Tabloid” in a small piece of tissue-paper or in a B. W. & Co. Medicine Cachet. The “Tabloids” of Saccharin, when placed in a cup of tea or coffee, are seen to dissolve readily with slight effervescence. Many prefer the flavour to that of sugar. The perfect wholesomeness of Saccharin has now been demonstrated to the satisfaction of all medical men, in spite of the statements made by those interested in French sugar refineries.

We shall have great pleasure in forwarding to any Pharmacist who would like to test them specimens of our soluble “Tabloids” for experiment, also of our “Tabloids” of Chlorate of Potash or Voice “Tabloids,” which latter are purposely compressed hard and made as slowly soluble as possible.

BURROUGHS, WELLCOME & CO., SNOW HILL BUILDINGS, LONDON, E.C.

SITUATIONS WANTED.

1s. for twelve words; 6d. for every six words beyond.

- AS DISPENSER** to doctor. Address, F., 149 Mile End Road, E.
- ASSISTANT**: Minor; South Coast preferred. W. W., 103 Massina Avenue, N.W.
- ASSISTANT**: time for study; good experience; aged 25. J. R. W., 125 Hampstead Road.
- JUNIOR**: 4 years' experience; abstainer; good references. Neal, 1 Kemble Road, Croydon.
- JUNIOR** or Improver: 3 years' experience; passed Prelim. Tomson, Vernon House, St. Neots.
- EVENING** engagement desired. Address "Chemicus," Westminster College, Trinity Square, S.E.
- TEMPORARY**, or Manager, by Qualified Chemist; small salary. A. G., Mr. Osborne, Berkeley.
- JUNIOR** or Improver: 5 years' experience; Birmingham or neighbourhood. Smith, Chemist Pershore.
- ASSISTANT**, aged 21 (no stores); can prescribe. "Extractor," 195 High Road, Kilburn, N.W.
- AS Assistant &c.**, for evenings after 7 P.M., Saturdays 3 P.M. "Minor," 7 Silcote Road, Albany Road, S.E.
- LOCUM-TENENS**, Manager, or one day per week; 45; qualified; references. Williams, 70 Ledbury Road, W.
- ASSISTANT**, or Dispenser to surgeon; aged 25; outdoors; varied experience. G. Michell, Ridgeway, Plympton.
- AS ASSISTANT**: time for reading; experienced; aged 26; good references. G. W. S., 128 Ball's Pond Road, N.
- MANAGER**; Irish qualification; experienced; married; good references. "Ch-mist," 5 Waterloo Terrace, Cork.
- ASSISTANT** (outdoors); 23; excellent references; Major qualification. Woodruff, Westleigh, Cheddle Heath, Stockport.
- SURGEON'S** Dispenser, or part time Assistant: London; outdoors; aged 24; good references. H. Lemon, 31 Stanmore Street, N.
- EXPERIENCED** Dispenser: 26; disengaged half of the week. "Beta," Office of THE CHEMIST AND DRUGGIST, 42 Cannon St., E.C.
- ASSISTANT** or Branch: qualified; can Prescribe and Extract Teeth; aged 28. Address, "Minor," 30 Rutland Street, Hampstead Road, N.W.
- ASSISTANT**: Cape or Australia; aged 26; good-class experience; good references. W., care of Mr. Marshall Leigh, Pharmacist, Brighton.
- ASSISTANT**, Dispenser, or Counterman: 6 years' experience; Kent preferred; disengaged about end November. "Spes," 2 High Street, Crayford, S.E.
- WHOLESALE**.—An experienced Pharmacist desires an appointment as Chemist; now disengaged. S. A. I., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.
- DISPENSER**: public institution preferred; outdoors; aged 35; married; highest references. "Statim," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.
- WHOLESALE**.—Assistant; disengaged; 8 years' experience with City firm at the Dry, Wet, Export, Cheeking, Warehouse and Finishing Counters; excellent references; aged 36; single. "Export," 156 Great Dover Street, Borough.
- CHEMISTRY** and Horticulture.—A Gentleman (38) with a practical knowledge of the above, combined with business experience and the control of men, seeks a post in England or abroad, where his services would meet with a fair remuneration. E., Ford House, Exeter.
- TRAVELLERSHIP**.—Gentleman, educated, *au courant* with medical matters and accustomed to doctors (3 years' medical work), desires post; willing to go into offices for Preliminary training; pleasant address, good conversational powers, business-like, energetic, good correspondent; references. Thompson, 58 West Ham Lane, Stratford, London, E.
- WHOLESALE DRUG TRADE**.—Situation wanted by an English gentleman, aged 23, who has had two situations of trust in the drug trade, and who thoroughly understands drugs and chemicals, and in his last place was entrusted with buying; he can speak and correspond (commercially) in German; he can produce first-class personal references in the drug trade. Apply by letter, to E. J., care of T. Christy & Co., 25 Lime Street, London.

- DISPENSER**, for spare time. R. H., 7 Queensbury Street, Essex Road, N.
- ASSISTANT**, in London; aged 24; Major; good references. Carman 436 New Cross Road.
- IMPROVER**: 18; abstainer; good character. "Piceptors," Medical Hall, Nailsea, Somerset.
- ASSISTANT**: aged 28; time for study. "Chemicus," Triangle Hotel, Charterhouse Square, E.C.
- LOCUM-TENENS**, or Manager; qualified; experienced; references. J., 90 Great Thornton Street, Hull.
- ASSISTANT**: aged 24; married; disengaged. "Chemicus," 17 Ramsden Terrace, Wintown Street, Leeds.
- RE-ENGAGEMENT**: Patent Medicine department; aged 27. R., 27 Lower Talbot Street, Nottingham.
- AS Dispenser** to a Surgeon, or to manage Retail; London or suburbs preferred. "Sigma" 33 Chancery Lane, London.
- JUNIOR** (19); 5 ft. 10 in.; good experience and references. "Onemicus," c/o Roberts, Chemist, Ellesmere Port, near Coeser.
- MANAGER**, temporary, or permanent; abstainer; experienced. "Veritas," 10 Bond Street, Higher Broughton, Manchester.
- WHOLESALE**.—Wet Counter, in London; highest references, 159/22, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.
- ASSISTANT**: good Dispenser; first class London experience; outdoors; aged 24; disengaged. C., 134 Pinery Park Terrace, Kilburn.
- ASSISTANT**, 7 years' experience; aged 23; salary £30; London preferred; good dispenser. "Statim," 27 Lincoln Road, Horn-castle.
- EVENING** engagement wanted; disengaged after 7.30 P.M.; aged 28; competent. "Evening," care of Mellin & Co., Chemist, Piccadilly Circus, London.
- H. BRAMPTON**, Chemist, Sudbury, Suffolk, wishes to recommend his late Apprentice as Junior in a good Mixed Country trade, with time for study.
- AS Junior**, in a good Retail and Dispensing Business; aged 21; 5 years' experience; height 5 ft. 8 in.; disengaged; please state time. Hugh Roberts, Glanadda, Bangor.
- MANAGER**; country preferred; qualified; good abilities; married; abstainer; steady, trustworthy; disengaged; good references. "Speriamo," 25 Tolmers Square, N.W.
- ASSISTANT**, with good general knowledge; 19 years' experience; aged 36; height 5 ft. 10 in.; unqualified; 10 years in last situation; good extractor. "Dens," 445 Oxford Road, Reading.
- ASSISTANT**: good experience; will be disengaged 25th of this month; have been over seven years in one house; character will bear strictest investigation. Address, W. B., 123 High Street, Guildford.
- AS Manager** of Branch, with view to purchase; sea side business entertained; qualified; experienced; good Prescriber and Extractor; can introduce very saleable Proprietaries. Address, "Cycle," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

MISCELLANEOUS.

- ACCUMULATION** of travellers' samples, consisting of trusses, suspensory bandages, chest-expanding braces, belts, &c., to be cleared as job lots; to any druggist doing a quick and cheap trade would be great bargain; to be seen by appointment only. Vincent Wood, 3 St. Andrew's Street, Holborn Circus, E.C.
- FOR** Disposal, valuable established Proprietary Article; very profitable having a nice sale in all parts of England through chemists. Title, trade-mark, and all rights fully secured; merely wants a little attention to develop into a big thing: owners, a firm of wholesale druggists, are too much engaged to do justice to it, hence this advertisement: particulars of sales, &c., given to principals only; price about £100 inclusive; owners prepared to take a good quantity yearly. Apply to Pynar, care of Horners & Sons, Mitre Square, Aldgate, London.
- PRELIMINARY AND MINOR**.
- ALL** Students who are preparing should send for particulars of a method of study which will enable them to pass with ease. Enclose stamped envelope to Mr. J. Tully (Hill's Prizeman), Chemist, Hastings. Established 1872. References to past and present Pupils. Student's Herbarium, 100 specimens, 7s. 6d., post free.
- STUDENTS' AIDS TO EXAMINATION**.
- PRELIMINARY**.—Arithmetic and Metric System, 1s. How to Write an Essay, 3d. Caesar Simplified, 1s. Quotient Points in Latin Grammar, 1s. 6d. Minor. —Equations Simplified, 1s. Illegible Autographic Prescriptions, 1s. Notes on Dispensing, 1s. Prescriptions given at the Minor, 6d. "Chemist," care of Mr. J. Edwards, Wye, Kent.

SOLUBLE

"TABLOIDS."

THE first "Tabloids" we introduced into this country were used chiefly for throat affections, &c., and were purposely compressed hard in order that they might dissolve slowly, giving the advantages of a concentrated solution of the drug acting continuously upon the diseased surfaces. The fact of these "Tabloids" being so hard has led many to believe that "Tabloids" were unsuitable for administering medicines when prompt solution or disintegration was required. This, however, is an error, because the solubility or disintegration of the drug depends very much upon the force of compression. Our "Tabloids" of Chlorate of Potash and the Voice "Tabloids" are compressed so hard that one of them will take an hour or more to dissolve upon the tongue, whereas the "Tabloids" of Quinine, Salol, Antipyrin, Phenacetin, Sulphonal, Compound Sulphur, and many others, constitute the most soluble form of the drug next to an actual solution. This fact can be readily tested by placing one of these "Tabloids" upon the tongue, and we shall be pleased to supply specimens to any medical men or chemists desiring to make the experiment. Recent improvements in our machinery enable us to regulate the pressure with the greatest nicety; every batch of "Tabloids" is now tested before being bottled, and we are prepared to guarantee that all "Tabloids" of compressed drugs intended to be swallowed for prompt constitutional effect will dissolve or disintegrate promptly. The Quinine "Tabloids" are more soluble than ordinary Quinine Pills, as they are to a certain extent porous, not being made with a soft excipient, but by compressing the dry drug. Although Sulphonal and Salol themselves are insoluble in the saliva, the "Tabloids" fall to pieces on the tongue in a few minutes. The Antipyrin "Tabloids" are quite soluble, and are the most eligible form for administering the drug, because the bulk is more agreeably swallowed in the "Tabloid" form than in any other. The solubility and activity of "Tabloids" of Cascara Sagrada, Compound Cathartic, Laxative Vegetable, &c., are so generally well known among the medical profession as not to require any comment on our part. "Tabloids" may be taken easily and quickly by being placed upon the tongue and swallowed with a draught of water or other liquid. If the drug has any disagreeable taste it can hardly be noticed. For very fastidious patients the disagreeable taste can be entirely covered by enveloping the "Tabloid" in a small piece of tissue-paper or in a B. W. & Co. Medicine Cachet. The "Tabloids" of Saccharin, when placed in a cup of tea or coffee, are seen to dissolve readily with slight effervescence. Many prefer the flavour to that of sugar. The perfect wholesomeness of Saccharin has now been demonstrated to the satisfaction of all medical men, in spite of the statements made by those interested in French sugar refineries.

We shall have great pleasure in forwarding to any Pharmacist who would like to test them specimens of our soluble "Tabloids" for experiment, also of our "Tabloids" of Chlorate of Potash or Voice "Tabloids," which latter are purposely compressed hard and made as slowly soluble as possible.

BURROUGHS, WELLCOME & CO., SNOW HILL BUILDINGS, LONDON, E.C.

ANTIPIRYRIN.

From the investigations of Reiss, Müller, Engel, and Umbach, "there is good ground for belief," as MacAlister puts it, "that in fever the lowering of temperature with antipyrin is a secondary phenomenon, and the lowering of nitrogenous [metabolism and] excretion a primary one." In his Croonian lectures on "Antipyretics, Dr. MacAlister related his experience of the marked anodyne influence of antipyrin in the lightning pains of tabes, cancer, otalgia, rheumatoid arthritis, supra-orbital neuralgia, &c." He said: "Hypodermic injections of Antipyrin were with many physicians taking the place of morphine for the simple allaying of pain. . . . Another condition in which it had an excellent effect, some called it a specific action, was migraine. In his own person he had found that nothing acted so promptly, or so certainly, in averting or assuaging the paroxysm."—(*British Medical Journal*.) Dr. Kingsbury gave the drug in twenty cases, some of which had suffered for ten years. "In no case did the antipyrin fail." "It prevents as well as cures the attacks." The *British Medical Journal* (Jan. 7th, 1888) says: "There seems no reason to doubt that in Antipyrin we possess a powerful anodyne for pain of nervous or rheumatic origin. Dispensed in the form of Tabloids, it is easily dosed, and may be administered either hypodermically or by the mouth."



Antipyrin Tabloids (5 gr.) supplied to the Trade, in bottles containing 25 and 100, at 18s. and 54s. per doz. Retail, 2s. and 6s. Antipyrin in powder or crystals, at 3s. 5d. per oz.

Above Prices subject to usual Discount.

BURROUGHS, WELLCOME & CO., SNOW HILL BUILDINGS, LONDON, E.C.

See Recommendatory notice of Medical Press and Opinions of the leading Dermatologists.

WRIGHT'S

Detergens, acting for four hours, arrested future growth."

Of all Druggists, Wholesale and Retail, throughout Great Britain, Ireland, and Colonies.

LIQUOR

From the *Lancet*, Dec. 22, 1886:—"In our hands it has been a most effective agent in skin diseases, especially of the chronic eczematous class, and one class of psoriasis which had resisted all other kinds of treatment speedily got well under the application of the *Liquor Carbonis Detergens*. We esteem it a very valuable addition to our list of skin remedies."

1871:—"We have tested it, and can affirm its value as a detergent agent. We consider the *Liquor* is an article of great utility."

Kept in stock and sold by all Druggists (Wholesale and Retail) throughout the United Kingdom and Colonies. PROPRIETORS—

W. V. WRIGHT & CO., 48 Southwark Street, LONDON.

CARBONIS

DETERGENS.

The *Practitioner* of September, 1881:—"Eczema connected with varicose veins of the leg—also Pruritus Scroti, Labiorum, and Ani—is best relieved by weak tarry lotions, one of the best of which is *Wright's Liquor Carbonis Detergens*."

P. McLEOD, Colonel R.A., Inspector-General of Ordnance, Ordnance Office Madras, writes Sept. 10, 1887:—"I can certify that '*Liquor Carbonis Detergens*,' has cured me of a PSORIASIS of 21 years, incurred in Burmah, after every effort of such an able skin doctor as Sir Erasmus Wilson had failed."

From the *Medical Times and Gazette* Jan. 19, 1867:—"We have more than once called attention to the value of this remedy in chronic eczema."

From the *British Medical Journal*, Sept. 22



Sold by Chemists over 35 years.

BEWARE OF IMITATIONS.

This Original Brand is Well Advertised, and Sells Readily.

STOCKED BY WHOLESALE HOUSES

Boxes, 3d., 6d., 1s., 2s. 6d., and 7s. 6d.

Mint Street Works,
LINCOLN.

MARION'S PHOTO SUPPLY WAREHOUSE.

MARION'S Britannia Plates.
MARION'S Instantaneous Plates.
MARION'S Chloride Transparency Plates.
MARION'S Bromide Opal Plates.
MARION'S Portrait Chloride Opals.
MARION'S French Mounts for Photographs.
MARION'S Albuminised and Ready Sensitised Papers.
MARION'S Bromide and Carbon Papers.
MARION'S Cameras and Lenses.

Agents for Voigtlander's Celebrated Lenses.

KRUGENER'S PATENT BOOK CAMERA.

Takes 24 photos; can be carried in the pocket. Reduced Price 45s.

McKELLEN'S PATENT DETECTIVE CAMERA.

For plates $4\frac{1}{2} \times 3\frac{1}{2}$. The only Camera in which the exact image can be seen on the screen at the moment of exposure. Price £9 9s.

MARION'S PHOTO OUTFITS.

From 21s. to £50.

EVERY REQUISITE FOR PHOTOGRAPHY.

22 & 23 SOHO SQUARE, LONDON, W.



ESTABLISHED 1859.

PRINCIPAL OFFICE, 42 CANNON STREET, LONDON, E.C.

BRANCH OFFICES:

MELBOURNE, SYDNEY, AND NEW YORK.

Published every Saturday.

Subscription 10s. per year, payable in advance; dating from the commencement of any month.

Supplied only to persons connected with the Trade.

Post free to every country in the world. Single copies 4d. each.

Cheques or Postal Orders should be payable to EDWARD HALSE, and crossed MARTIN & Co.

Supplied regularly to every member of the following Societies, who have adopted THE CHEMIST AND DRUGGIST as their official organ.

The Pharmaceutical Association of New Zealand.

The Pharmaceutical Society of Queensland.

The Pharmaceutical Society of South Australia.

The Hobart Chemists' Association.

The Launceston Pharmaceutical Association.

South African Pharmaceutical Association.

For Australasian subscribers the subsidiary journal, THE CHEMIST AND DRUGGIST OF AUSTRALASIA, is included.

Literary Contents.

PAGE	PAGE
At the Counter 556	Editorial Notes—(con.)—
Bankruptcy Report 547	Scarcity of Orris Root 552
Correspondence:—	Bankruptcy Act Report 553
The Weekly Half-holiday;	Foreign News 540
Postal-order Protection	French Pharmaceutical News.. 541
Book; Chemists' Assist-	Gazette 553
ants' Association 562	General News 539
Disintegrating Tabloids; The	German Pharmaceutical News 542
Title "Chemist and Drug-	New York Pharmaceutical Ex-
gist"; Straining the Law 563	amination 555
Legal Queries 563	Personalities 543
Miscellaneous Inquiries ... 564	Pharmaceutical Society of Ire-
Deaths 547	land 544
Economical Apparatus. By Dr.	Practical Notes 549
W. H. Ince 554	Preliminary Examination ... 543
Edinburgh Exhibition Awards 546	Provincial Reports 536
Editorial Notes:—	Scopola-Belladonna Plaster... 548
Amending the Pharmacy Act 550	Trade Notes 566
Kobert on Ergot 551	Trade Report 557

THE CHEMISTS' AND DRUGGISTS' DIARY, 1891, is now in course of compilation, and advertisers are requested to send in their orders and copy as early as possible. The work has attained an unequalled position as the chemists' and druggists' desk companion wherever English trade penetrates, and the circulation will this year again surpass that of any previous issue and that of any publication special to the trade.

A MANUAL OF PHARMACEUTICAL TESTING.—This book is a most practical work, and should be had by every pharmacist, as it will encourage the habit of testing the chemicals used in medicine, a habit that will in many instances lead to a higher class of investigation, and better knowledge. This testing will, moreover, lead to greater uniformity in products—a great desideratum to both druggists and physicians, as well as the patrons of both—since it will be a check upon jobbers and manufacturers, forcing them to adopt a uniform standard of quality and purity.—*Druggists' Bulletin.*

MR. DAVID STORRAR gave young Dundee chemists some good advice last week, and what there is of it of general interest will be found on page 538.

THE LIVERPOOL CHEMISTS' ASSOCIATION has entered upon the consideration of the new Pharmacy Bill. At present they pronounce no definite opinion on it.

BERLIN PHARMACISTS have inaugurated a society similar in aim to the Paris one, whose doings we so regularly chronicle. We give a concise report of the first meeting.

CORNER FOR STUDENTS.—In consequence of the absence of Mr. R. J. Moss on a voyage, the report of the last Corner for Students is unavoidably postponed for two or three weeks.

THE EDINBURGH EXHIBITION awards, so far as they interest the drug trade, are given on page 546. Many British and French firms whose names are familiar to the readers of THE CHEMIST AND DRUGGIST have come in for recognition.

HOME-MADE APPARATUS.—Dr. Walter H. Ince contributes to this issue a very useful paper, in which he shows how to make certain laboratory requisites cheaply and well. Dr. Ince will have more to say on the subject in another issue, and probably his papers may have the effect of drawing suggestions from other ingenious chemists.

A MEDICINE STAMP FOR FRANCE.—The French Minister of Finance proposes a compulsory medicine stamp for medicinal specialties, toilet articles, and artificial mineral waters. He avowedly follows the medicine tax in this country. The rate of duty proposed is scarcely half that charged here, but M. Rouvier expects to collect nearly half a million sterling from the tax. Of course the scope of it would be very much wider than is that of our medicine stamp.

LIQUOR ERGOTÆ.—There are few preparations which are so uncertain in action as liquid extract of ergot, but pharmacists have never known for certain why. In one of our editorial notes the explanation is given on the authority of Professor Kobert—viz., that it is due to the decomposition of cornutine, the most active of the active principles. Water has an influence in this decomposition; but there are other determining factors, as will be seen by a perusal of the paper.

PHARMACEUTICAL SOCIETY OF IRELAND.—With an attendance of twenty only at its annual meeting it might have been expected that the proceedings would have been brief. But some half-dozen fluent members of the Council had so many compliments to exchange that a full report would occupy twice the space we give to it. Mr. T. W. Robinson was elected to the Council as a new member, and illuminated addresses were presented to the President and Vice-President, in recognition of their services on the recent Parliamentary campaign.

BELLADONNA PLASTERS are now made extensively from the extract of *Scopola carnolica* root, as will be seen from the article by Mr. Williams. This was done even before Professor Dunstan called attention to this drug last year. It is of interest to note that the German investigators who since 1888 have been working on this drug have apparently concluded their labours. There seems to be no doubt that their *S. atropoides* is the same thing as Professor Dunstan's, and in a recent note by Professor Ernest Schmidt (*Arch. der Phar.*, page 435) particulars are given of the bodies isolated from the root. These include hyoscyamine, an alkaloid like hyoscyne, scopolitin (the fluorescent body whose identity as methyl esculetin, $C_9H_7O_3 \cdot CH_3$, is proved), and phytosterin (m.p. 133° – 134° C., or fully 10° under Professor Dunstan's).

Provincial Reports.

Items of news, and newspapers containing matters of interest to the trade, sent to the Editor will much oblige.

BIRMINGHAM.

THE HALF-HOLIDAY.—The chemists of Stratford Road have agreed to continue closing their shops from 2 till 6 on Wednesday afternoons throughout the winter.

BRIGHTON.

A CHEMIST'S LOSS.—At the Brighton County Court last week Mr. Smithson, chemist, of 1 Preston Road, Brighton, sued Messrs. Fellingham & Co., carriers, of 38 Frederick Place, for 1*l.* 7*s.* 6*d.*, value for goods lost in transit. The plaintiff handed the goods to Mr. Fellingham, who was the manager for the Globe Parcel Express, and is now the Brighton agent of that Company. The defendant contended that he should not have been sued, as the carriage had to be paid at the other end, and also said the delivery of the goods could be proved. Plaintiff had no witness to prove that the goods were not delivered, and the judge asked him if he would bring a fresh action in London, where the witnesses were, or if he would have this case adjourned. The plaintiff said he did not think he should proceed further, and the case was struck out.

EXETER.

CHEMISTS' ASSOCIATION.—A correspondent informs us that a local society was formed about 1858, with subscriptions of 10*s.* for members, and 5*s.* for associates. Mr. John Palk was the treasurer. The object at first was to circulate books and periodicals amongst the members. Many good books were bought. The society at first met in the mornings, quarterly, in Mr. Palk's back room; then so few attended that evening meetings were tried at the houses of the members, in hope of better attendance, and some friendly evenings took place, but generally only three attended. The Conference came in 1869, which gave a little impetus. A dinner was held at the London Inn, and some good men attended, who have left us, amongst them Daniel Hanbury, Mr. Morson, sen., John Cargill Brough, and others; some remain, such as Mr. Hyde Hills, and Dr. Jno. Attfield. Mr. Hills made a present of books. The society continued until about the time Mr. Palk sold his business to Mr. Passmore; then it languished. The library was kept at Mr. Palk's, and was open to all. Afterwards a large portion was transferred to the library of the museum, a condition being made that the trade only should have the privilege of borrowing books. "I hope," adds our correspondent, "that the new society will have a better fate than the old one."

CHEMISTS AND DRUGGISTS' ASSOCIATION.—At a meeting of this association, held at Messrs. Holman & Ham's on October 8, Mr. Lake, who was in the chair, read a paper on "Prices Charged for Poisons," in which, after some comments on the regulations required by the Pharmacy Act, he said: "Taking into consideration the dangerous character of poisons, both to the buyer and seller, the necessary qualifications, and, of course, education and its cost, as regards time and money, and the restrictions imposed upon the seller, I am of opinion that no paltry fee, such as 6*d.* per entry, is at all adequate to the service performed. Every hindrance should be placed in the way of sale of poisons for poisoning purposes. It is constantly noticed by medical men, juries, and the press how readily poisons can be obtained, greatly prejudicing our reputation. The law should be rigidly complied with in every case, and an inclusive charge of, say, 6*d.*, at least, made for any quantity of poison less than 6*d.* worth, or a fee of, say, 3*d.* for each entry, exclusive of the price of the poison. Due regard must of course be paid to districts where the poorer class reside, who can afford only a few pence. Personally I should like to name a higher figure, but have suggested so low a charge, hoping it will meet the views of chemists in different

districts, and perhaps be generally adopted in other towns. I should think every chemist could get 3*d.* for making an entry. The Council would certainly sanction such an act. The sale of poisons under Schedule A, Part II, must be made subject to the discretion of the seller." Mr. Lemmon said he fully endorsed the points brought forward by Mr. Lake in his paper, and gladly moved, "That a minimum charge of 6*d.* be made for all poisons contained in Schedule A, Part I." This was seconded by Mr. Reid. Some discussion arose as to the sale of vermin-killer, and, as an amendment, Mr. George Stocker moved, and Mr. Milton seconded, that the foregoing resolution be adopted, with the provision that 3*d.* be the smallest charge for vermin-killer. The resolution was carried in its amended form. The subject of "Early Closing" was introduced by Mr. Reid, who urged that earlier closing than is at present practised was most desirable, both from a professional standpoint, and also from the claims which a chemist's health has upon him. He moved, "That on and after November 1 all shops shall be closed at 8 P.M., and on Saturdays at 10 P.M." Mr. Stocker seconded. Mr. P. F. Rowsell (Holman, Ham & Co.) said that, as far as he was personally concerned, he fully endorsed Mr. Reid's views; but there were, he thought, some obstacles in the way of the 8 o'clock movement. Their association was but in its infancy. He suggested that "not later than 8 30 P.M." be substituted for 8 P.M. Mr. Foulraker seconded, and the resolution, having been so amended, was unanimously agreed to.

LIVERPOOL.

NEW COMPANY.—The business of H. Martindale & Co., of 43 Pembroke Place, Liverpool, aerated-water manufacturers, &c., has been converted into a limited company with a capital of 4,000*l.*, in 1*l.* shares.

CARBOLIC POISONING.—On Thursday, October 9, Annie Edwards, forty-seven years of age, of 3 Quadrant Terrace, Richmond Row, was removed to the Northern Hospital in the horse ambulance, suffering from the effects of carbolic poisoning. The usual remedies were employed, but the woman was evidently in a very precarious condition. Whether the carbolic was accidentally or wilfully taken has not transpired.

ASSAULT BY A PROVOKED CHEMIST.—At Widnes County Court, last week William Sadler, grocer and provision dealer, Widnes, claimed damages from Peter Smith, chemist, Victoria Road, for an alleged assault on August 13. From the evidence it appeared that plaintiff went to purchase medicine at defendant's shop. Defendant and others were in the shop, and plaintiff was served by the shopboy. Defendant asked the boy what change he was giving, and plaintiff asked why he interfered, afterwards calling him a puppy. It was said he repeated this, and defendant knocked him down. plaintiff's head striking the counter as he fell. The jury considered that Mr. Smith had received provocation, but that he had no right to strike Sadler, and awarded 20*s.* as damages.

PHARMACEUTICAL STUDENTS' SOCIETY.—The annual general meeting of this society was held on Thursday, Oct. 9, in the Young Men's Christian Association Hall—Mr. H. Wyatt, jun., in the chair. The officers for the ensuing year were elected as follows:—President, Mr. H. Wyatt, jun.; Vice-presidents, Mr. J. R. Johnson and Mr. H. B. Thornton, F.C.S.; Treasurer, Mr. R. H. Mitchell; Secretary, Mr. Frank Walker. The president, in his address, said papers had been promised for every evening of the session. He referred to the difficulties in carrying on societies of this kind; but as they had a good and popular programme before them, he hoped there would be no lack of interest. Lectures and papers are promised by J. T. Conroy, B.Sc., Edward Davies, F.C.S., F.I.C., J. R. Johnson, F. C. Larkin, M.R.C.S., George Tate, Ph.D., F.I.C., A. Shaw, H. B. Thornton, F.C.S., J. S. Ward, F.C.S., T. H. Wardleworth, T. S. Wokes, H. Wyatt, Jun. The next meeting will be held on Thursday, the 23rd inst., at 8.30 P.M., in the society's rooms, 6 Colquitt Chambers, Colquitt Street, when a paper will be read by Mr. T. S. Wokes on "The Art of Spreading Plasters."

CHEMISTS' ASSOCIATION.—The fourth general meeting of the 41st session was held at the Royal Institution on Thursday, October 16—Dr. Symes, president, in the chair.

Amongst the miscellaneous communications the president exhibited a sample of fluid extract of cascara sagrada which was seven years old. He said it had been stated that cascara preparations, like decoction of aloes, lost most of its bitterness by age. Perhaps it would be scarcely fair to attempt to settle the question from a single specimen, but the one now before the members was certainly very bitter. Mr. Conroy said he had noticed that samples of tincture of cascara had lost their bitterness after keeping, but he had never observed this with the fluid extract. Mr. Abraham had found that boiling destroyed to some extent the aperient properties and some of the bitterness of cascara.

Mr. George Taylor was to have shown a model of his new disinfecting-bottle in operation; but since undertaking to do this he found that such a description might prevent him from obtaining a patent subsequently in some Continental countries. Dr. Symes said he would not discuss the invention in the absence of Mr. Taylor, but would show them a contrivance of his own, totally different from the other, and yet accomplishing the object in view very efficiently. This consisted of an 8-oz. wide-mouthed bottle, fitted with a cork, and two tubes passing through—one a wide tube rising 2 inches above and terminating immediately below the under-side of the cork; the other, narrow, passing to the bottom of the bottle, and curved over the lip of the bottle on the outside. This tube contained a simple glass valve, which allowed a liquid to flow out, but not to enter the bottle. The bottle filled with carbolic acid, or any efficient disinfectant, and placed in the usual 2-gallon cistern over a W.C., automatically discharged a portion of such disinfectant into the latter portion of the flushing water each time the cistern was emptied. The quantity discharged depended on the capacity of the wider tube, and this could be regulated at will.

The next business was the new Pharmacy Bill. Dr. Symes said he thought it would be better not to discuss and take a vote on the Bill at once, but for him to point out the changes which it would bring about if it became law, and to answer questions concerning it so far as he was able to do so; and if the members would give the whole matter their careful consideration, a deliberate decision could be arrived at in a subsequent meeting. In the course of a short discussion, Mr. Parkinson (local secretary of the Pharmaceutical Society) mentioned that it was his intention to invite the President to visit Liverpool probably at about the date when he would visit Manchester. Dr. Symes was unanimously re-elected President of the Association for the ensuing year.

NOTTINGHAM.

NOTTINGHAM AND NOTTS CHEMISTS' ASSOCIATION.—Last Friday evening (October 10) a social meeting of this association was held at the Sunday School Institute, to inaugurate the work of the present session. A number of specimens, of general and pharmaceutical interest, were exhibited, including some rare and curious drugs, metallic ores and metals, the process of yarn-making, microscopical objects, &c. Refreshments were provided. In the course of the evening Mr. Councillor Fitzhugh, president of the association, made a few remarks to the students.

IRELAND.

PHARMACEUTICAL SOCIETY OCTOBER EXAMINATIONS.—Preliminary:—Messrs. J. Moore, W. J. Galbraith, J. Mc. M. Cole, and A. W. Mann have passed. Two were rejected. Licence:—Messrs. V. G. L. Fielden, F. Harley, F. J. Martin, W. A. Lynass, A. Watterson, J. A. Woodside, H. A. Gray, R. L. Thompson, W. P. Ryan, V. Carney, B. Cunningham, and J. S. Gilbert have passed. One was rejected.

DOBBS'S LITERARY ASSOCIATION.—This is an association of the employes of W. Dobbin & Co. (Limited), chemists, Belfast. It is as yet young, but it is vigorous, and it began the present session on Tuesday, Oct. 7, with a social meeting at the Castle Restaurant, whereat Mr. C. M. Weir, L.P.S.I., the president of the association, took the chair. An exceedingly pleasant evening was spent with song and sentiment, and in the course of it Mr. Samuel Gordon was presented with an illuminated address and a purse of sovereigns on the occasion of his marriage. Messrs. J. M. Dobbin, W. C. Dobbin, J. Long, and D. S. Jackson testified in eulogistic

terms to the manner in which Mr. Gordon discharged his duties in the warehouse. Mr. Weir replied. Quite an attractive programme has been got up for the session.

SCOTLAND.

DUNDEE.

ASSISTANTS' ASSOCIATION.—The committee have produced an excellent syllabus for the current session. There are to be four musical and social evenings, two nights devoted to short papers, two debates, and the following papers:—"Profitable Extras" (as seen in the life of a country chemist), by T. C. Henderson; "Notes on the B.P.," by John Forsyth; "First Aid in Poisoning Cases," by W. Kinner, M.B.C.M.; "Putrefaction and Infection" (2nd paper), by F. W. Young, F.R.S.E., F.C.S.; "Gems," by William G. Lamont; "Insectivorous Plants" (illustrated), by William Mair; "Notes on a few B.P. Ointments," by George Little; "Pharmacy as it Is," Robert M. Lindsay; "Dispensing Notes," by John McDonald; "Common Parasites," by William Smith; "Some Suggestions for Pharmacy Students," by J. Rutherford Hill, M.P.S.; "Alkaloids," by James A. Kinnear; "Pharmacy Abroad," Anonymous; "The Air we Breathe" (with experiments), by John Foggie, F.C.S.; "The Trade," by Donald M'D. Skinner. The meetings are held in the Association's room, at 74 Commercial Street, on Thursday evenings, the chair being taken at 9.15 P.M.

MR. STORRAR ON SOME TRADE MATTERS.—The second session of the Chemists' Assistants' and Apprentices' Association was inaugurated last Thursday (October 9) by an address given by Mr. David Storrar, of Kirkcaldy. The meeting was held in the Commercial Hall, and, in addition to the members, a considerable number of employers were present, the audience numbering about 100. Ex-Bailie Doig, hon. president, was in the chair, and supporting him were Messrs. D. H. Ferrier, J. Foggie, F.C.S., Charles Kerr, J. B. Mason, F.C.S., J. W. Russell, J. H. Thomson, F. W. Young, F.R.S.E., &c. The chairman, in a few appropriate sentences, introduced Mr. Storrar, who, on rising to speak, was greeted with applause. Having complimented the association on the work which it had done last session, he proceeded to speak of the safe lines upon which the association might work, especially emphasising the importance of

STUDYING PHARMACEUTICAL POLITICS.

"At no period of the history of the trade," continued the speaker, "have more important changes taken place than those which are taking place or are being originated now. It is the chemist of the future, not the chemist of the day, who will be most affected by these changes; and it is not only desirable, but absolutely essential, that you should follow their discussion with intelligent interest and take your part in them. Amongst much that is doubtful, one thing is certain—namely, that, to hold his own, the chemist of the future must be, speaking generally, a more highly-trained and better educated man than his predecessor. A few of us may think that something more might be done than is being done to help those already in business; but there can be no doubt whatever that the best and only true policy of the rising generation of pharmacists is to fit themselves for their work—make themselves indispensable to the public and command its confidence—and there is no fear for the future. Next year the Pharmaceutical Society will celebrate its jubilee, and it must be a source of great satisfaction to us all to think how much good work it has done for the benefit of its members and for the welfare of the public. Thanks very greatly to its efforts, the trade during the past fifty years has made great strides in organisation, in efficiency, and in public confidence; and it lies with you, and those composing such associations as yours, to say whether the next fifty years will show a proportionate advance. If you, acting upon the old Highland motto, stand 'shoulder to shoulder,' there is no reason why an even greater advance should not be made." After speaking of some of the papers which had been read before the Association last year, Mr. Storrar went on to speak of the wisdom of including

"A LITTLE PLAY"

in the programme. He was an advocate for a reasonable amount of relaxation from the toil and worries of business,

and, while giving all due credit to the nobility of work, he thought it was not a fair conception of work to suppose that "its main object should be the earning of money for its own sake, and to secure the position and honour which money gives. Such work," he said, "carries with it no dignity and no lasting satisfaction, and has as its motive pure selfishness. A proper provision for the future and 'the glorious privilege of being independent' are certainly legitimate aims; but the highest conception of work leads us beyond all selfish ends, leads us to cultivate all our powers for the general good, induces us to do all work which comes in our way thoroughly and honestly for the work's sake, so that we may leave the world better than we found it. There is not much fear of any of us being tempted by excess of wealth. Our chance of adding house to house and farm to farm is so remote that we need scarcely take it into account. We must remember, however, that we can serve as faithfully in that which is least as well as in that which is greatest, and that the temptations are as great in an obscure as in a more prominent life. I sincerely hope that many of the younger people here will be very successful in life, and that they will use their success to good purpose; but what I wish particularly to say to-night is this: that we have each of us, in our own sphere, work to do, and which it is of the utmost importance should be done well. There is a fearful amount of bad work done at the present time. I do not refer to that done of set purpose—of which I hope there is no occasion to speak here—but careless, non-conscientious, and therefore dishonest work. The tendency is to earn money as easily as possible—to take no pride in work done for its own sake—to make things for sale instead of for use". . . but if work is done to the best of a man's ability—if one's pride is put into it, and one has a thorough knowledge of his business—one "is independent of patronage and of joint-stock companies." Mr. Storrar then proceeded to speak more in detail regarding recreation and the musical evenings, and in the course of his remarks thereon he said: "I cannot well see how in most chemists' shops

SHORTER HOURS

could not be introduced if there were more unanimity in the trade. Still, from its nature, the chemist's must always be a trade in which longer hours are required than in most others, although in this respect we in Scotland are better off than those in England. Here the system of out-door assistants and apprentices ensures at least a couple of hours freedom during the day, and a fairly long evening to the employés; whilst there an hour's outing daily and one evening a week is considered a liberal allowance. At the best, however, our leisure time is limited, and that is all the more reason why the few hours we have to spare should be used well." This enabled the speaker to address himself more particularly to the session then inaugurated, and that took him back to the meeting at Bloomsbury Square in the previous week. He referred to Sir Edward Sieveking's address and the presentation of the prizes, remarking that the only regret he felt was that only one Scotchman took a medal. "No doubt," he said, "the fact of our having a Scottish Examining Board and many centres at home where University and other efficient training can be got, prevents our students going to Bloomsbury Square; but it is a pity all the same. Not only is the education to be got there the best of its kind, and specially adapted for our wants; not only is the blue ribbon of pharmacy, and many other pharmaceutical honours and bursaries only to be won there; but there can be no manner of doubt that there only can be implanted that *esprit de corps* which, as a profession, we so much lack. The very atmosphere and surroundings of the place promote its growth. The School of Pharmacy, equipped as it is, and with its surroundings, forms an institution of which we as members and associates of the society ought to be proud, and which we Scotchmen ought to take more advantage of."

Mr. D. H. Ferrier, in commenting upon the address, expressed his willingness to support any movement towards securing better hours. He regretted that the Pharmaceutical Council had never, in his opinion, been in touch with Scotch chemists; they, as a body, had done nothing for Scotland, and at present they did not have the support or sympathy of the trade. He, however, hoped that an improvement would soon take place in this respect. Mr. F. W. Young concurred in Mr. Storrar's opinion that Scotchmen

should find their way to Bloomsbury Square; at the same time he thought, with the advantages they possessed in Dundee, they could obtain a thorough knowledge of almost all the subjects they required for the "Minor." He suggested a course of study at the local college, which, if carefully followed, would not only enable the student to pass the Minor with ease, but also the Major. Mr. J. W. Russell and Mr. Charles Kerr having also spoken, the thanks of the meeting was accorded to Mr. Storrar on the motion of Mr. W. Edwards (president) and Mr. Lindsay (secretary). Mr. Storrar, in the course of his reply, sympathised with Mr. Ferrier's remarks regarding the Pharmaceutical Council, but argued that chemists themselves were to blame: they would not join the Society, so how could they expect to get what they wanted? It was not the chemists of the country that ruled the Society, but the Society them. Let them, he continued, join the Society, then they could nominate and return members who would act according to their wishes. As long as the chemists held themselves aloof, they could not expect that large body to act according to their wishes.

EDINBURGH.

THE EXHIBITION AWARDS.—The jurors in the section which included sanitary appliances retained Mr. Peter Boa, pharmaceutical chemist, to conduct the chemical tests applied to filters, &c.

CHEMISTS' ASSISTANTS' AND APPRENTICES' ASSOCIATION.—A dozen meetings are provided for in the syllabus of the 13th session, two of the meetings are to be "open," one is to be devoted to "notes and queries" and a fourth will be an "apprentices' night." On six other evenings the following papers will be read:—"Pharmacy Notes," Jas. H. Hoseason; "Pharmacopœial Tinctures," John Findlay; "Extract Belladonnæ," Wm. Cowie; "Tinct. Nucis Vom.," Alex. J. Dey; "Tinct. Kino," G. Victor Wright; "Kola—The New Dietetic," H. G. Parker; "Ung. Hydrarg. Nit.," John Lothian; "Notes from Practice," Peter MacEwan; "Manufacture of Nitric Acid," J. Rutherford Hill; "Pil. Asafoetid. Co." William Smith. The annual conversazione will be held in the Literary Institute on Friday, December 12.

ALLEGED INFRINGEMENT OF THE DENTISTS' ACT.—At the Edinburgh Sheriff Court, on Friday last, at the instance of W. B. Paterson, hon. sec. British Dental Association, Squire W. Allen, 40 Queen Street, was charged with infringement of the Dentists' Act by using a brass plate on his door, with the words:—"Dr. Squire Winfield Allen, graduate of New York Dental College, formerly with Dr. Hague, dentist"; also with having his name entered in the "Edinburgh Post Office Directory" as an American dentist and doctor of dental surgery. In the course of the examination Mr. Paterson admitted that the statements on the doorplate and in the directory were correct in point of fact, but considered that they implied that Dr. Allen was registered under the Dentists' Act, which was not the case. The offence was, therefore, a technical one. The sheriff took the case to *arandum*.

PILFERING FROM A WHOLESALE DRUGGISTS.—At the Edinburgh Sheriff Criminal Court on Monday, before Sheriff Crichton, a respectable-looking young man, named Archibald Augustus Irving, was charged with having, between January 1, 1888, and October 1, 1890, while an assistant with Messrs. Duncan, Flockhart & Co., South Canongate, stolen Macassar oil, boxes of chocolate, capsules, shaving-sticks, tooth-paste, perfume, mercury, gold ink and paint, pomade, three books, &c., besides 158 tubes of chloride of gold, and 32 ounces of nitrate of silver. Counsel spoke to Irving's respectability, and produced certificates showing the excellent education he had received. He had been led into committing the offence, he said, by simply pilfering small articles for personal use, and it was only comparatively recently that he took anything for the purpose of sale. Apparently he had got into fast company, and had run into debt. He had given his employers every facility for recovering the stolen goods. Sheriff Crichton imposed a sentence of two months' imprisonment. The chloride of gold and nitrate of silver had, it seems, been sold to a London firm. As they were only charged half-price, their suspicions were aroused. They communicated with the authorities in Edinburgh, and inquiries made by the latter led to the arrest of Irving.

GLASGOW.

THE DUKE OF ARGYLL is a martyr to rheumatic gout, but Prof. Story, of Roseneath, an eminent ecclesiastic, has put him on the track of a cure. It seems that a Mr. Robertson, of Clynder, Roseneath, has a "cure" which he does not advertise, but has patented his invention, and does not seek or encourage patients. The correspondent of the *Hospital Gazette* knows him and reports that Mr. Robertson makes no visits nor will he give away any medicine. He merely gives the persons a draught each time they call, charging, of course, a very high fee. The Duke agreed to undergo the treatment and visited the gentleman for his draught just like the others. The result is surprising. The Duke has written a long letter stating that he has been completely cured by the treatment, and mentioning other cases which, at his request, were also dealt with, and with success. The Duchess of Argyll has also written a letter to the same effect. Mr. Robertson refuses to divulge his secret, which will, no doubt, be incorporated into some patent medicine at no distant date.

CHEMISTS' ASSISTANTS' ASSOCIATION.—The meetings of this association were resumed on Wednesday evening, in the Waterloo Rooms, when Dr. McGregor Robertson, of the University staff, gave an address on the "Mutual Relations of Physicians and Pharmacists." Dr. Robertson indulged in some historical reminiscences before he got into the heart of his subject, and then he had something to say on poly-pharmacy, old prescriptions with fifteen or more ingredients, and so on. But this sort of thing is fast disappearing from medicine. Modern physicians are contented with a few active drugs, and researches in physiology, pathology, and therapeutics have been aided by developments in pharmacy, which have achieved the production of alkaloids and other active principles. Pharmacists have produced these, and physicians have, by experiments, determined their effects. In this way the two have succeeded in giving a new character to therapeutics. Dr. Robertson proceeded to explain the physiological action of several principles. What contemporary medicine chiefly aims at, he said, is the administration of a drug in such a form as will enable it, when necessary, to run the gauntlet of the digestive processes, and reach the site of action in the least altered and most concentrated state. This problem has partly been solved, but it is still worthy the attention of pharmacists, especially in the direction of protecting medicinal substances from modification before they are applied to the human body. The address was well received by a good audience, and the usual compliments were paid to the lecturer at the conclusion.

INVERNESS.

CHEMISTS' ASSISTANTS' ASSOCIATION.—The inaugural meeting was held on Tuesday night in Y.M.C. Association Rooms, Inverness. Mr. Macritchie occupied the chair, and there was a good attendance of the members and friends. Dr. J. Milne Chapman read a highly interesting and very instructive paper on "The Healing of Wounds." After describing the different kinds of wounds, and how they were severally to be treated, the lecturer said the healing art was no part of the chemist's business, but, at the same time, when accidents did take place, in very many cases the injured person went or was carried right away to a chemist's shop, and the object of his lecture was to minimise as much as possible the ignorance that prevailed with regard to the manner in which wounds ought to be treated until the doctor arrived. At the close of the lecture Dr. Chapman was accorded a very cordial vote of thanks.

THE *Lancet* has been asleep for some time surely. In commenting upon the applications by Margate chemists for wine licences, this journal remarks:—"We regard this as a new departure in licensing that may be more disastrous even than grocers' licences. Chemists are licensed to dispense drugs, not lightly-veiled spirits and wine. We protest, in the name of the medical profession, against this grave innovation." For years advertisements of the medicated wines which chemists are called upon to provide, but which they are not allowed to sell without a licence, have appeared in the *Lancet*, and it is difficult to see where the innovation is.

General News.

STOP THE THIEF!—Messrs. Dunn & Co., of the Stirling Chemical Works, West Ham, inform us that six platinum dishes were stolen from their premises on Sunday, October 12—three dishes 10½ inches diameter by 8½ inches deep, weighing about 80 oz. each; and three dishes 8½ inches diameter by 6½ inches deep, weighing about 50 oz. each. They ask us to mention this so that if anyone should hear of any attempt to dispose of much platinum (in scrap or otherwise), they might kindly acquaint the police and advise Messrs. Dunn & Co. by telegraph.

A CHEMIST'S ATTEMPTED SUICIDE.—John Cutforth, chemist and druggist, of New Cross, who had been on a walking tour with a friend, arrived at the Star Inn, Edenbridge, on Tuesday evening last, from Tunbridge Wells, and retired soon after eight o'clock. On Wednesday morning his friend was horrified on awaking at seeing Cutforth standing in front of his toilet-glass hacking away at his throat with a penknife. He immediately seized Cutforth's arm, and calling assistance, prevented him from doing further injury. The would-be suicide is said to be in a hopeless state.

A CHEMIST'S WEIGHTS.—Mr. A. Woodcock, of Holloway Road, chemist, was charged on October 2, at the Clerkenwell Petty Sessions, under the Weights and Measures Act with having in his use for trade thirty-eight weights unjust and unstamped. Mr. Stevens Lewis defended. Mr. Stubbs, the inspector, proving visiting defendant's shop and finding the unjust weights. In cross-examination by Mr. Lewis, witness stated that he would not examine a surgeon's dispensing weights, as he was a professional man. Mr. Lewis then contended that the section did not apply to dispensing chemists, who were not tradesmen within its meaning. The chairman said the Act allowed the bench full power, and fined the defendant 5*l*.

KLEPTOMANIA BY A CHEMIST.—At the Surrey Quarter Sessions, at Guildford, on Wednesday, Mr. John Phillips, chemist, of Bagshot, was indicted for stealing, in July, eight rose-trees, the property of a nurseryman at Windlesham. It will be remembered that the prisoner has been arrested on a similar charge before. A doctor, who was called, said the prisoner evidently suffered from mental aberration on this subject of flowers only. About 12 o'clock on Sunday the prisoner was seen, with a silk hat, and dressed in his best clothes, carrying under one arm a young beech tree, which had been pulled up by its roots, and under the other a bundle of gorse. It was raining hard at the time. The prisoner was ordered to be detained during her Majesty's pleasure.

EXPLOSION AND FIRE AT CHEMICAL WORKS NEAR ARBROATH.—Early on Wednesday morning of last week, an explosion and fire took place at the recently erected chemical works at Elliot, two miles from Arbroath, belonging to Messrs. Dobie, Sons, & Co., Leith. The scene of the explosion was an underground tank containing about 22,000 gallons of boiled tar. The covering of the tank was thrown off by the force of the explosion, and four puncheons of naphtha which had been on the top of the tank were shattered. The fire extended from the burning tank to a block of buildings occupied as a dwelling-house by the workmen and their families. A steam pump belonging to the works was brought into operation, and the fire was extinguished with the aid of liquid ammonia. The damage done by the fire is considerable, but is covered by insurance.

THE RIVAL MEDICINE-MEN.—ALLEGED IMPERSONATION OF AN INLAND REVENUE OFFICER.—At Burslem Stipendiary Police-court on Monday the case of John Bounds, patent-medicine vendor, against James Henry Wood, advertising agent to Sequah (Limited), which was adjourned from Tunstall on the previous Thursday, was again heard. The complainant charges the defendant with personating an Inland Revenue officer on October 2; by another summons Bounds is charged with having used threats of violence to Wood on October 4. John Bounds, the complainant, said he was now residing in lodgings, at the house of Mr. Pennington, railway servant, 32 Price Street, Burslem. At about 11.30 on the morning of October 2 the defendant—whom he had never

seen before—came to his house and said, “I am a detective-inspector for the Inland Revenue Office, London, and am sent down here to arrest you and impound your horses and carriage.” Defendant further said that he was not to sell any more medicine until he heard from him again, and, in consequence of this, witness did not sell any medicine from his van on the Thursday and Friday—the two following days. He believed Wood to be what he represented himself, but he discovered on Saturday morning that he was not an Inland Revenue officer. This evidence was corroborated by the landlady and others, and an Excise man proved that Wood’s name did not appear in a list of Excise officers. Mr. Richardson, for the defence, read the section of the Act—very recently passed—under which the case was brought, which stated that anyone who assumed the “name, designation, or character of an officer,” of the Revenue, “for any unlawful purpose should be guilty of a misdemeanour.” In this case he contended that the motive was not unlawful, and that all the defendant had done—supposing that the evidence was true—had been to stop the complainant selling without a stamp medicines that required a stamp, so that the defendant had merely prevented the complainant from committing an illegal act. Wood was committed for trial at the Staffordshire Quarter Sessions, and Bounds bound over to keep the peace. Wood was admitted to bail.

THE CHEMISTS’ ASSISTANTS’ ASSOCIATION opened its fourteenth session on October 9 with an inaugural address from the President, Mr. A. Campbell Stark. The address dealt firstly and principally with pharmaceutical affairs in general, and secondly with those of the association itself. Quoting the oft-repeated remark that “our affairs are in a state of transition,” the speaker said this might be especially so in pharmaceutical affairs, though he was not acquainted with anything in nature not in a state of transition. Comparing the business now with what it was when he first knew it, he found this noticeable difference—that the public was then accustomed to supply their need for a certain class of goods from chemists, and had not so completely grasped the fact that they could be obtained cheaper elsewhere. “Now customers have discovered that the great bulk of the chemist’s business of these days can be carried on more successfully by someone else before we have realised this fact ourselves. But while we have been regarding, with feelings of natural indignation, the gradual withdrawal from us of a monopoly to which we had no sound claim, and the loss of which we might have foreseen to be inevitable, we have, as a body, been neglecting much that was ours by training if not by right. The trade, for instance, in photographic chemicals and apparatus, in electrical appliances, and in a variety of things used in the various branches of applied science, and which the pharmacist is unquestionably the fittest person to conduct, has been generally ignored, and thus a large source of revenue, equal perhaps to the loss we have sustained elsewhere, is daily lost to us.” He had little hope from legislation, but much from education, and he sketched the modern ideal pharmacist as a man who has the pharmacy of the newest remedies at his finger’s ends, and the remedies of the newest pharmacy in his cases; who is the trusted adviser of the medical men of his district on drugs, surgical appliances, and instruments; who is a referee on the latest novelty in the processes and apparatus of photography, and the compounder of the newest solutions for the local devotees of that respectable cult; who can repair the domestic Leclanché battery, and advise on the sanitary arrangements of the household, and who, in short, as representing the available scientific authority in the neighbourhood, is a man the use of whose knowledge and skill is worth paying for, and who may be relied upon as an individual whose attainments and knowledge are superior to those of the majority of his neighbours. The business of such a man is unassailable by the most unscrupulous “cutter” existing. A vote of thanks to the President for his address was proposed by Mr. Joseph Ince, supported by Messrs. Dymond and Ellwood, and cordially given.—The first “musical and social” was held on Thursday evening. Mr. S. M. Burroughs presided.—Next Thursday Mr. T. P. Blunt will read his paper on “Stereo-chemical Theories.”

APOTHECARIES in her Majesty’s service take rank as captains.

Foreign and Colonial News.

PERUVIAN QUICKSILVER.—The cinnabar mines of Santa Barbara, near Ayacucho, Peru, have been leased to an English corporation by the Government. The mines have been idle for some time in consequence of natural impediments, caused by earthquakes.

THE balance-sheet for the first financial year of the manufactory of dietetic products. Ed. Loeflund & Co., Stuttgart, Germany, shows a gross profit of 147,664 marks, and a net profit of 40,070 marks.

HONOURS TO A SCIENTIST.—A committee has been formed in Germany for the purpose of erecting a monument to the famous chemist Mitscherlich in commemoration of the centenary of his birth (January 7, 1894). About 12,000 marks have already been collected.

A PROFITABLE BUSINESS.—The balance-sheet of the Fabriques de Produits chimiques de Thaun et de Mulhouse at Giromagny, in France, shows a gross profit for the year 1889–90 of 305,550f., and a net profit of 172,579f. Last year the gross profits were 136,130f. These are the works which manufacture the synthetic musk.

PHARMACEUTICAL BEQUESTS.—The proprietor of Alves’ pharmacy in Berlin, who died some time ago, has bequeathed to every assistant actively engaged in his business at the time of his death a sum of 500 marks (25*l.*) for every year he has been in his employ. A sum of 20,000 marks was also left to the Berlin Apotheker Verein by the deceased gentleman.

THE SERVIAN MERCURY MINES.—These works, situated at Avala, in Servia, and now worked by an English company, with 180,000*l.* capital, are being increased considerably, and plant is being erected which will admit of the treatment of the poorer as well of the better grades of ore. The yield is at present from 150 to 200 bottles per month, and the mercury is sent to Austria and England.

NEW DRUG WAREHOUSE IN CAPE TOWN.—On Sept. 19 Messrs. P. J. Petersen & Co., wholesale druggists, opened new and spacious premises with a champagne luncheon. “The Prosperity of the Firm” was proposed by Mr. Mocke, and seconded by Mr. J. Heynes. Representatives of the principal pharmacies were present, as well as Messrs. F. S. Clarabut and Watkins, representing London houses.

SACCHARIN AND ITS OPPONENTS.—The Hamburg general agent of the German saccharin works writes to correct certain statements in the paragraph headed “different views of saccharin,” which appeared in our issue of October 4. He states that the decision taken in Bavaria, which regards all articles in which sugar is replaced by saccharin as adulterated, does not emanate from any responsible authorities at all, but is merely a resolution carried some months ago at a meeting of the Association of Bavarian Practical Chemists, and carries no actual weight whatever. In Russia, he also observes, saccharin has hitherto been admitted without restriction, and the authorities have taken no decision as yet with regard to its prohibition, though it is not impossible that later on the Russian duty on saccharin may be increased in order to protect the sugar interest.

THE FINAL SHAPE OF THE MCKINLEY BILL.—The *O. P. & D. Reporter* states that the following alterations have been made in the drug and chemical section of the McKinley Bill since it was sent back from the Senate to the House of Representatives:—Tannic acid has been changed to 75c. per lb.; barytes to \$1.12 per ton; manufactured ditto to \$6.72 per ton; bronze powders to 12c. per lb.; bay rum to \$1.50 per gallon; bristles to 10c. per lb.; brushes to 40 per cent. ad val.; cork and cork bark to 10c. per lb.; manufactured cork to 15c. per lb.; Dutch metal leaf to 8c. per package; hemlock extract to $\frac{1}{2}$ c. per lb.; liquorice paste and juice to 5 $\frac{1}{2}$ c. per lb.; logwood extract to $\frac{1}{2}$ c. per lb.; peppermint oil to 80c. per lb.; phosphorus to 20c. per lb.; ground sumach to $\frac{1}{10}$ c. per lb.; and extract to $\frac{1}{2}$ c. per lb.; sulphate of soda to \$1.25 per ton; tallow to 1c. per lb.

ARTIFICIAL OR NATURAL.—The Landgericht at Suhl, in Germany, has been called upon to decide a peculiar libel suit. The proprietor of the so-called "Ottilien-Quelle," a mineral spring in the neighbourhood of Suhl, has long been accused by his competitors, in more or less direct language, of being himself the manufacturer of the water which he sells as "natural mineral water." It is alleged that the spring simply supplies ordinary water, into which the proprietor introduces by mechanical means the chemicals which are found in it. The proprietor has now brought an action for libel against one of his accusers, and claims heavy damages. In order to settle the question the Landgericht has decided that the conducting-pipes shall be cut off and the spring pumped dry. When a fresh water-supply accumulates, specimens are to be sent to Professor Reichardt, of Jena, for analysis. In the meantime the defendant in the action has been ordered to contribute 1,000 marks towards the cost of disconnecting the supply.

DOCTORS' FEES IN RUSSIA.—A new official scale of fees for medical practitioners has been drawn up in Russia, and will shortly be submitted to the Council of the Empire for approval. It graduates the fees which the physician shall charge according to the social position of the patients, who are divided into three classes. The first consists of capitalists, landed proprietors, merchants of the first guild, large manufacturers, and all officials down to the sixth rank; the second class embraces all employés or servants in private employ in receipt of a salary of more than 1,000 roubles a year, merchants of the second guild, commercial agents, and officials of the seventh and eighth ranks. All other inhabitants belong to the third class. The fees are further graduated according to the population of the place in which the medical assistance is given, the charges for the first class ranging from 1 to 2 roubles; for the second, from 0.75 to 1.50 roubles; and for the third, from 0.50 to 0.75 roubles per visit. For night visits special fees are allowed, and the fees for all imaginable surgical operations are also strictly defined.

THE INDIAN GOVERNMENT CINCHONA PLANTATIONS.—The report from the director of the Indian Government plantations for the year 1889-90 states that during that period 373,690 trees, of which 270,000 were red barks, were uprooted, leaving the total number of 4,682,401 trees, of which 1,612,000 are red barks, in the plantation. Red barks are no longer propagated, the object being gradually to convert the plantation into one exclusively of quinine-yielding species. The products manufactured consisted of 1,833½ lbs. of sulphate of quinine and of 6,578 lbs. of febrifuge. The quinine cost Rs. 11½ and the febrifuge Rs. 10¾ per lb. The whole of the quinine and the greater part of the febrifuge were manufactured by the new fusel-oil process; and, as the arrangements for working this process were quite completed during the year, the old acid and alkali method of manufacture has now been definitively abandoned. An additional year's experience of the fusel-oil process confirms the previously expressed opinion of its complete success. The quinine turned out by it is of excellent appearance and great purity, in the latter respect comparing favourably with most of the brands of the drug of European manufacture.

THE SALE OF POISONS IN ITALY.—According to the correspondent of the *Pharm. Zeit.* a decree was promulgated in Italy on August 14, scheduling drugs of which the sale in any quantity is left free to any trader, and others which, while also left free of sale, may only be sold in certain fixed quantities. The latter list contains chloroform (200 grams) and corrosive sublimate (50 grams) while among the former are found such articles as acet. aromat., alcohol, rad. althææ, rad. angelicæ, rad. bardanæ, flor. absinthii, flor. chamomill., camphora, fol. cardui bened., absorbent cotton, ol. aurantii, lavand., rosæ and terebinth.; tragacanth, lichen. islandic., lycopodium, sem. lini, fol. malvæ, melissæ, menthæ, myrrha, naphthalin, rotnke menthæ, lign. quassie, rad. ratanhiæ, herb. rutæ, salep, flor. sambuci, hirsutines, syr. aurantii, mori, simplex., liquiritiæ, succ. liquirit., tamarindi, terebinthina, rad. zingiberis, and sacch. lactis. There is an appendix to the second list enumerating certain articles of which it is stated that the right of free sale has never been doubtful, as their use is principally confined to domestic or technical purposes—starch, laurel leaves, anise, bismuth, and

black oxide of manganese being among these harmless substances. The vexed question between the Italian pharmacists and their "wild" confrères the druggists as to what constitutes the medicaments which the latter may sell is set at rest by this decree.

FRENCH PHARMACEUTICAL NEWS.

(From our Paris Correspondent.)

TREHALOSE, NOT CREALOSE.—The name of the sugar peculiar to mushrooms was accidentally mis-spelt in the report of the Paris Society of Pharmacy meeting, page 507. The sweet principle in question is called *trehalose* or *mycose*.

A NATURAL HISTORY LABORATORY is soon to be organised at La Seyne, on the Mediterranean. The Faculty of Sciences has received for the purpose an important legacy, and a grant of 15,000f. from the town. Professor Dubois has charge of the project.

MEAT INSPECTION.—Henceforth the Paris slaughter-houses will be under the supervision of a corps of three veterinary surgeons, with ten assistants. On Mondays and Thursdays, the great market days, five veterinary inspectors will be added to examine all the animals brought in either to be slaughtered or to be forwarded elsewhere.

DEATH FROM OXALIC ACID.—Last week a labourer named Coffre, wishing to take a cathartic, asked his employer at Saint-Denis for a dose of Epsom salt. Five hours after taking the dose, 60 grammes, the man died in great agony. The doctor, who was summoned too late, was unable to do more than ascertain the nature of the poison. An inquest will be held.

UNQUALIFIED DRUG-SELLERS.—A raid has just been made upon several grocers in Elbeuf and other places in the north of France for the "illegal exercise of pharmacy," to wit the selling of one-ounce bottles of sulphate of quinine, santonin pastilles, and castor oil. Nine of these unqualified pharmacists were sentenced in a batch at the correctional tribunal of Rouen to a 500f. fine.

TO SHOW THE EARTH TURNING.—At the Eiffel tower Professor Mascart has established a mammoth pendulum. A steel ball weighing 211 lbs. is, by a bronze wire 380 feet long, suspended from the second platform, and allowed to swing near a layer of sand. Under the ball is a style tracing a mark in sand at each oscillation. As about eleven seconds elapse between oscillations, each mark will be nearly one-fourth of an inch distant from the preceding one. The apparatus, scientifically useless, is to serve as a popular demonstration of the earth's rotation.

ANTISEPTICS FOR MIDWIVES.—In conformity with the Academy of Medicine's advice, the Minister of the Interior has issued an order which allows pharmacists henceforth to deliver to midwives certain poisonous antiseptics. As was mentioned in *THE CHEMIST AND DRUGGIST* at the time, two preparations have been adopted by the Academy. One is a powder composed of corrosive sublimate, 25 centigrams; tartaric acid, 1 gram; and indigo sulphate solution, 1 drop, to be dissolved when wanted in 1 litre of water. The other is vaseline, with 1 per mille of corrosive sublimate. Every parcel or pot shall bear the orange-yellow label, with the name of the article and the word "Poison" clearly printed.

THE PLASTERING OF WINES.—After several postponements, and contradictory orders resulting partly from requests by the Spanish Government, a Ministerial order has finally prohibited the addition of plaster to wines beyond certain limits. The maximum allowable shall be that recommended by the Brussels Pharmaceutical Congress—namely, 2 grammes of potassium sulphate per litre. And now agricultural papers are instructing vintners how to test their wines, so that when they find it necessary to add plaster to a batch of fermenting must, they may know how much—or how little—unplastered wine will suffice to bring the mixture down to within the prescribed limits.—A new Ministerial order has again postponed the enforcement of the law to April 1, 1891. The date is quite appropriate.

THE COMING TARIFF BILL.—The Ministers in council have decided upon one feature of the Bill to be introduced at no distant date. The tariff which is to replace all commercial treaties will be a maximum one, and applicable to all alike. But for each favour granted by a foreign nation, an equivalent concession will be made. It is somewhat curious that a similar expedient for avoiding the hampering "favoured nation" clause was resorted to by the United States. Some fifteen years ago, wishing to admit the Sandwich Islands sugar free, and no other, they granted the privilege professedly as an equivalent for a free admission of American tobacco to the Islands. It was certain enough no other country would claim such reciprocity.

A PATENT-MEDICINE STAMP.—The proprietary medicine men are likely to be called upon to help make up the Treasury deficit. Ever since 1873 the affixing of a revenue stamp to guarantee genuineness has been allowed to manufacturers as a privilege. But now it is to be compulsory. At the Budget Commission sitting of October 14, Minister Rouvier proposed that henceforth all proprietary medicines (*spécialités*), toilet articles, and artificial mineral waters shall bear revenue stamps as follows:—Under 2*f.*, 10*c.* (1*d.*, below 20*d.*); from 2*f.* to 5*f.*, 20*c.* (20*d.* to 4*s.*, 2*d.*); above 5*f.*, 30*c.* The tax is estimated to bring in 12,000,000*f.* a year—more than enough to cover the financial deficiency. The reasons brought forward by M. Rouvier are that England has long had such a tax; that specialists are very wealthy, injure true pharmacy, and contribute nothing to the Treasury; and finally that when in 1871 M. De Lorgeril introduced a Bill of the kind, the Academy of Medicine, on being consulted, heartily approved of the project.

A DECISION ADVERSE TO PHARMACISTS.—In December, 1889, the Syndicate of the Loire pharmacists prosecuted before the Saint-Etienne correctional tribunal (1) Porteret, a pharmacist of the first class, (2) Sister Marie-Joseph, and (3) the Mayor of Saint-Etienne—the first for illegally dispensing medicines to the public at the town hospital, the second for acting as his assistant, and the third as representing the hospital managing commission. The court considered as proved the facts that Porteret is a regularly graduated pharmacist, that Sister Marie-Joseph acted under his personal supervision, and that considerable quantities of medicaments were retailed out of the hospital, none however being sold at any of the branches. But it held that, although as a rule the pharmacist must be the owner of the pharmacy where he dispenses, there is an exception, sanctioned by the law of August 7, 1851, in favour of pharmacists managing by contract hospital pharmacies. Consequently the defendants were acquitted, and the Syndicate ordered to pay costs. Next the Syndicate, joined for the occasion by the Haute-Loire Pharmaceutical Syndicate, carried the case up to the Lyons Court of Appeal. But the court has confirmed the tribunal's decision. Now for the Cour de Cassation.

NEW USES FOR FLUORIDES AND HYDROFLUORIC ACID.—In a series of lengthy papers contributed to the French scientific press, Dr. J. Effront, of Brussels, has described a number of experiments showing the beneficial influence of fluorides and hydrofluoric acid on diastase and yeast during the saccharifying and fermenting processes. In view of modern discoveries the effect seems to be one of selection, fluorides impeding or preventing the development of lactic and butyric ferments, and thereby promoting clear alcoholic fermentation. Dr. Effront has succeeded in obtaining from maize 96 per cent. of the theoretical amount of maltose and 4 p. c. of dextrin, the solution yielding by simple evaporation crystallised maltose. The proportion of acid needed is very small, but not quite clearly stated. The temperature preferred is 30° C. instead of 50° C., as usual. To produce alcohol, the author prefers potassium fluoride. He has found that with the addition of the fluoride maize may, without previous saccharification, be fermented at once after boiling to dissolve the starch and cooling. As a typical experiment, 9 kilos. of maize, 1½ kilo. of malt, and water enough to make 54 kilos. of mash, on being, with 270 grams of yeast and 27 centigrams of potassium fluoride, set to ferment for three days at the temperature of 30°, will yield in alcohol 63·26 per cent. of the weight of dry starch contained in the materials, while, under most favourable circumstances, the

alcohol obtainable without fluoride averages 41 to 42 per cent. Another advantage claimed for the process is that, no butyric acid forming during the fermentation, the spirit obtained is free from unpleasant taste and smell. The process has been, or will be, patented in the name of the Brussels Société Générale de Maltose.

GERMAN PHARMACEUTICAL NEWS.

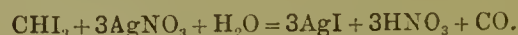
(From our Berlin Correspondent.)

BERLIN PHARMACEUTICAL SOCIETY.—A number of Berlin chemists, all well known in literary and scientific circles, have formed themselves into a society, to meet once or twice a month, for the purpose of reading papers and discussing scientific questions. No definite programme has yet been prepared. Some wish to make the new society a section of the Apotheker Verein, while others advocate an independent existence.

Jambul.—Dr. J. Holfert read a paper at the first meeting of this society proving that what Helbing exhibited at the Berlin Medical Congress as genuine jambul (a drug never seen on the continent) was really *Syzygium jambulanum* and that there are no true jambul seeds in commerce, those found belonging to another species of *syzygium* and to *Jambosa vulgaris*. It is to be regretted that a drug so useful in diabetes should be discredited by such worthless substitutes.

The Glycerine Test.—Dr. E. Ritsert dealt with the ammonio-nitrate of silver test for glycerine in the new German Pharmacopœia. He has found it very reliable, and states that glycerine answering this test will contain no arsenic. As it is so easily applied, he thinks that a perfectly pure glycerine will soon be produced.

The Estimation of Acetone.—The same author also contributed a paper in which he stated that acetone is found in the urine of persons living on albuminous food or abstaining, like Cetti, from food altogether. It is also present in cases of diabetes, in brain-diseases, and in fevers. To estimate the amount, he separates it as iodoform by adding iodine to an alkaline solution, and triturates the iodoform, dissolved in alcohol acidified with nitric acid, with an alcoholic solution of silver nitrate.



This method is generally applicable for the estimation of small quantities of iodoform—*e.g.*, in testing iodoform gauze.

Mustard-oil Distillation.—A useful hint for the distillation of essential oil of mustard was given by Dr. Hirsch. Ordinarily the first portions of the oil are decomposed by the action of the copper of the still. Dr. Hirsch recommends the addition of a little ammonium sulphhydrate, which forms a coating of copper sulphide, before distilling the seeds.

The Purity of Cotton-wool.—Dr. Link found that cotton-wool nominally pure contains much stearic acid. This adulterant, he believes, is added after purification, in order to give crispness to the wool.

These and other papers show that even up to the present some good work has been done by the society.

WEAK AS WATER.—Professor E. W. Morley, of the Western Reserve University, asserts us that the ratio of hydrogen to oxygen in water is about 1 part in 10,000 more than the ratio of 2 to 1. Is it not just as possible that Mr. Morley's experiments were 1 in 10,000 wrong?

THE OWNER OF A PROPRIETARY MEDICINE is regarded as an unprincipled shark by too many druggists. He is a man like the rest of us, in many instances has risen from the ranks of the retail druggists by the exercise of superior business ability and ambition of spirit. If we attempt to filch his formula, we do him the same character of injury that we would inflict on the man whose pocket we pick. The druggist who does a little trade in a tooth-powder of his own make would resent bitterly any attempt to discover its formula, or to trade upon the reputation it has gained, and yet this same druggist sees no harm in a similar treatment of the wealthy proprietor.—*Pharmaceutical Era.*

Pharmaceutical Society of Great Britain

PRELIMINARY EXAMINATION.

This examination was held on Tuesday, and the following are the questions which were given:—

LATIN.

(11 A.M. to 12.30 P.M.)

I. For all Candidates. Translate into Latin:—

1. Procas, King of the Albans, had two sons.
 2. He says that the enemy have come.
 3. It is very difficult to conceal faults from a friend.
 4. Caesar was murdered by the conspirators.
 5. All things had to be done by the king at one time.
- II. Translate into English *either* A. (Caesar) *or* B. (Virgil).

(Candidates must not attempt both Authors.)

A. CAESAR.

1. Id hoc facilius eis persuasit, quod undique loci natura Helvetii continentur; una ex parte Rhodanus, latissimo atque altissimo, qui agrum Helvetium a Germanis dividit; altera ex parte monte Jura altissimo, qui est inter Sequanos et Helvetios; tertia lacu Lemanno et flumine Rhodano, qui provinciam nostram ab Helvetiis dividit. His rebus fiebat, ut et minus late vagarentur, et minus facile finitimis bellum inferre possent: quae de causa homines bellandi cupidi magno dolore afficiebantur.

2. Haec quum animadvertisset, convocato consilio, omniumque ordinum ad id consilium adhibitis centurionibus, vehementer eos incusavit; primum, quod aut quam in partem, aut quo consilio ducerentur, sibi quaerendum aut cogitandum putarent. Ariovistum, se consule, cupidissime populi Romani amicitiam appetisse; cur hunc tam temere quisquam ab officio discessurum judicaret? Sibi quidem persuaderi, cognitis suis postulatis, atque aequitate conditionum perspecta, eum neque suam neque populi Romani gratiam repudiaturum.

Grammatical Questions.—For those only who take Caesar.

1. Decline throughout, singular and plural—*his rebus, magno dolore* (par. 1).
2. Write, in full, the indicative present and subjunctive pluperfect of *ducerentur* and *appetisse* (par. 2).
3. Parse fully—"Id hoc facilius eis persuasit" (par. 1).
4. What are *deponent* verbs and *impersonal* verbs? Write two short sentences in illustration.

B. VIRGIL.

1. Talia voce refert, curisque ingentibus aeger
Spem vultu simulat, premit altum corde dolorem.
Illi se praedae accingunt dapibusque futuris:
Tergora deripiunt costis et viscera nudant,
Pars in frusta secant veribusque trementia figunt,
Litore aëna locant alii flammisque ministrant.
Tum victu revocant vires, fuscisque per herbam
Implentur veteris Bacchi pinguisque ferinae.

2. Postquam introgressi, et coram data copia fandi,
Maximus Ilioneus placido sic pectore coepit:
O Regina! novam cui condere Jupiter urbem,
Justitiaque dedit gentes frenare superbas,
Troes te miseri, ventis maria omnia vecti,
Oramus: prohibe infandos a navibus ignes,
Parce pio generi et propius res aspice nostras.

Grammatical Questions.—For those only who take Virgil.

1. Decline in the singular—*altum dolorem, veteris Bacchi* (par. 1).
2. Write, in full, the indicative present and subjunctive pluperfect of *coepit*, *parce* (par. 2).
3. Parse fully—"propius res aspice nostras" (par. 2).
4. What are *deponent* verbs and *impersonal* verbs? Write two short sentences in illustration.

ARITHMETIC.

(12.30 P.M. to 2 P.M.)

[The working of the questions, as well as the answers, has to be written out in full.]

1. Multiply 98,756 by 60,324; and find what number added to the result will make it divisible by 90,000 without a remainder.

2. Multiply the difference between 11 cwt. 3 qrs. 17 lbs. 10 oz. and 5 cwt. 2 qrs. 23 lbs. 11 oz. by 528.
3. The captain and his two mates have respectively $\frac{1}{4}$, $\frac{1}{5}$, $\frac{1}{10}$ of the cargo allotted to them; the remainder belongs to 121 shareholders, and each of these receives 119*l.* 10*s.* What was the total value of the cargo?
4. Reduce 26 of $\cdot 877083\bar{1}$ to the decimal of half-a-sovereign.
5. Write down the Metric Table of Weight. If, with 34 kilog. of wool, 25 m. of flannel, 60 centim. wide, can be made: what length of similar flannel, 80 centim. wide, can be made with 103 kilog. of wool?
6. The length of a street is 937 ft. 6 in., and its breadth 66 ft. 8 in. Find the cost of paving it, at 8½*d.* per square yard.
7. A bankrupt has good debts to the amount of 456*l.* 18*s.* 1*d.*, and the following bad debts—360*l.* 7*s.* 10*d.*, 120*l.* 13*s.*, and 19*l.* 18*s.*—for which he receives, respectively, 4*s.*, 5*s.*, and 9*s.* in the pound. His own liabilities amount to 3,408*l.* 12*s.* How much can he pay in the pound?

ENGLISH.

(3 P.M. to 4.30 P.M.)

1. Analyse the following:—

"Well had he learned to curb the crowd
By arts that veil and oft preserve the proud;
His was the lofty port, the distant mien,
That seems to shun the sight, and awes if seen."

2. Parse the following words taken from the passage given in Question 1:—*well, veil, lofty, if seen.*
3. Write down ten compound verbs with different prefixes, and give their meanings.
4. In the following passage supply the necessary capital letters, and put in the stops and inverted commas where necessary:—a few voices however were raised in favour of a censorship these papers it was said frequently contain mischievous matter then why are they not prosecuted was the answer has the attorney general filed an information against any one of them and is it not absurd to ask us to give a new remedy by statute when the old remedy afforded by the common law has never been tried on the question whether the bill should be read a second time the ayes were only sixteen the noes two hundred.
5. This must be attempted by every candidate. Write a short composition on *one* of the following subjects:—
(i) The Evils of Procrastination.
(ii) Frugality.
(iii) "Unity is strength."
(iv) "There is a tide in the affairs of men
Which, taken at the flood, leads on to fortune."

Personalities

MR. E. A. HOLLOWAY has dissolved his partnership with Mr. Judd, of Leamington, and has removed to 34 Fleet Street, Torquay.

MR. THOMAS HARLEY, who for some time has been an assistant in the two principal pharmacies in Glasgow, has purchased the old-established business carried on by Mr. James Gowans at 21 High Street, Perth.

MR. PAGE WOODCOCK, of Lincoln, has disposed of his retail business to Mr. Houfe, of York, and is now engaged in the patent-medicine business carried on for many years by his father, the late Mr. Page D. Woodcock.

MR. J. F. BROWN, pharmaceutical chemist, Market Square, Dover, has prepared a concise explanation of technical electrical terms, with brief notes on electric lighting, and will send a copy to anyone who sends a stamped addressed envelope for the purpose.

Pharmaceutical Society of Ireland.

THE annual meeting of this Society was held on October 6 at 11 Harcourt Street, Dublin, at 7.30 P.M., Mr. Charles Evans, President, in the chair. There were also present eight members of the Council and eleven members of the Society.

The minutes of the last annual meeting were confirmed. As only the requisite number (seven) of members had been nominated for the Council, it was ruled that no scrutiny was necessary, and the President declared the following gentlemen duly

ELECTED MEMBERS OF THE COUNCIL

for twelve months:—Messrs. Robert Simpson, Dublin; G. Lane McCormack, Monkstown; Dr. R. A. C. Burnes, Dublin; William F. Wells, jun., Dublin; Richard Sunner, Cork; and Edward M. Hodgson, Dublin—the six outgoing candidates; and Mr. Thomas Wm. Robinson, of Kingstown.

The PRESIDENT then in accordance with custom addressed the meeting on

THE WORK OF THE YEAR.

He said he would not detain them long, as he thought members who attended should have time at their disposal to criticise the work which the Council had done. The past twelve months (he continued) will always remain a marked era in the history of the Society on account of the Pharmacy Act (Ireland), 1875, Amendment Bill, 1890. I need not weary you with a detailed account of the provisions of that Act, with which you are thoroughly cognisant; but, with your permission, I shall briefly allude to a few clauses which have given rise to diversity of opinion. We cannot but regret that there are some points which we failed to obtain, which would have been a considerable gain, especially to licentiates scattered in poorly populated country districts; but I think you will admit that the chief point gained is that men who went into the drug business since 1875 will have to

SUBMIT TO AN EXAMINATION

as to the appearance of drugs and chemicals in common use sufficient to show whether or not they are familiar with the nature of the articles they handle, and, in addition, an examination in the rudiments of the English language. That the latter is requisite I consider there can be no manner of doubt, although some gentlemen who formerly were our opponents strongly protested against such a supposition as insulting; but I think you will agree that some test of competency is required when letters are received here addressed to the "Register" of the Society, enclosing a "statutory" notice, and asking to be "registard" to sell "medesines," the applicant having been for many years in "buisness." It is to be regretted that the Legislature in 1875 did not insert a clause in the Pharmacy Act passed for Ireland in that year, providing that no persons should take the title of "chemist and druggist" unless they were properly qualified and registered, and not only not assume the name, but unless registered they should not act as chemists and druggists. It could not be contended even by the most ardent advocates of free trade that there should be an unrestricted sale of poisons. The public are in a measure protected from purchasing bad food by its appearance, taste, and smell; but it is impossible for them to judge in this manner of drugs; and therefore in the interest of the public it would be beneficial to stop free trade with regard to drugs, with the exception of a few household remedies in daily use. Eliminate special technical knowledge from pharmacy and let drugs be sold by any shopkeeper, and the public will have no guarantee as to the quality of the drugs with which they are supplied. If pharmacy be merely a trade, it should be free; but if the State requires as a condition of its practice a special education, and that a pharmaceutical chemist, since he desires to deal in drugs, should,

FOR THE WELFARE OF THE COMMUNITY,

be properly trained, educated, examined, and registered, it is unwise for the public health that those who have but a

smattering of elementary knowledge, not even embracing the three "Rs," and who have received no training, no special education, unexamined and unregistered, should be allowed to do the same. But when once protection is spoken of, the cry of "monopoly" is raised. Were this the case, it would necessitate the enactment of a law limiting the number of those who keep open shop for the sale of medicine to a percentage of the population, as I am given to understand is the case in some foreign countries.

AS REGARDS PATENTS

there seems to be a very general impression that the Government stamp gives a sort of official guarantee of the value of the preparation; but, even if such were the case, it could not render the poisons contained in many of them harmless; and on these grounds the sale of these medicines likewise should be restricted. Unfortunately, in the age in which we live the desire seems to be to subordinate every other consideration to the supply of drugs and medicines at a cheap rate regardless of quality; and patents are sold at a fractional profit under the plea that thus more medicine will be sold. But will a person purposely take cold for the sake of obtaining an eighteenpenny cough-mixture for a shilling? On the contrary, as you are all aware, medicines are only taken in cases of necessity, let that necessity be real or imaginary. As the editor of the *Pharmaceutical Journal* has said in a recent issue—referring to the sale of poisons—"This is a matter that urgently requires consideration by chemists occupying the responsible position conferred upon them by the Pharmacy Act. They, being the only recognised vendors of poison, and being compelled under penalties to conduct sales of poison in accordance with specified regulations and formalities devised for the purpose of protecting the public, are entitled, while conforming to those requirements of the law, to fix the terms of remuneration for the services they render in this respect. It is unsuitable to the conditions of the case that the sale of poisons should be treated as a mere matter of trade, and that the price charged for a supply of poison should be regulated solely by regard to the intrinsic value of the article sold and to the rate and remuneration appertaining to an ordinary trade transaction which involves no special obligation or formality." I would now refer to section 19 of the Amendment Act, which tells of

THE EXAMINATION OF ASSISTANTS

to pharmaceutical chemists. This section, perhaps, more than any other, has called forth remarks of disapprobation. But it is an easy matter to multiply adjectives such as "crude," "ill-advised," "mischievous" and so forth, or to speak of the "wooden-headed policy of the Council." No grave objections were advanced to the Apothecaries' Hall conducting a similar examination. On the contrary, those who employed assistants were, as a rule, anxious that they should pass it as a test of their having a knowledge of the Pharmacopœia and of the various processes by which the compounds, both vegetable and chemical, are prepared: and how such a test can be advantageous when conducted by one examining corporation, and prejudicial when conducted by another, I must leave it to wiser heads than mine to solve. As to the plea that men who would pass it would be content with it and would be hindered from seeking the higher qualification, that seems a strange conclusion, as it would not give any right to keep open shop on one's own account: and one may naturally conclude that, were any man satisfied with such a qualification, he would, were it not in force, be satisfied to remain without any qualification whatsoever. In conclusion I would add a few words as to

THE CHEMICAL SCHOOL

which has been established during the present year. Owing to the closing of all medical night-schools it was absolutely indispensable to have some chemistry-class in Dublin where intending candidates could study practical chemistry, especially since the introduction of the rule (of doubtful utility) that all candidates must work at the bench for upwards of one hundred hours. Had not this school been started that would have been an impossibility to the majority of those desirous of entering for the licence examination. The school has furnished an opportunity to candidates of acquiring knowledge of practical scientific work, indispensable to a pharmacist. Strange as it may appear, even this

project was met by strenuous opposition. Nevertheless, the school—considering that it is but in its infancy—has succeeded beyond expectation: and at such a difficult crisis the Pharmaceutical Society may well be congratulated that amongst its members such efficient conductors could be found—teachers whose pupils have been eminently successful not only in the examinations of the Pharmaceutical Society, but also in the examinations of the leading medical boards of the three kingdoms. Gentlemen, although it may appear self-evident that, since the calling of a pharmaceutical chemist necessitates a curriculum involving hard study and much expenditure, when men had obtained the qualification they should be protected, yet I can assure you that had it not been for the able advocacy of your cause by the most honourable the Marquis of Waterford, I fear your representatives would have had a very different tale to tell. (Applause.) To him you are indebted for the clauses in the Pharmacy Amendment Act of 1890 which are favourable to the Pharmaceutical Society.

During the past year there were 45 candidates for the Preliminary examination, of whom 22 were successful; and 36 candidates went in for the licence, of whom 24 passed. We have 5 more members than we had this time last year. I take this opportunity of strongly recommending every licentiate to join the Society. Complaints are frequently made that the Society has done little, and that nothing is received for the guinea that is expended; but, were the Society supported by all its licentiates, the Council could show a bolder front when circumstances require it.

Mr. HODGSON (Treasurer), who has received with warm applause, presented the

FINANCIAL STATEMENT.

He was sorry to say that, for the first time in his experience as treasurer, he had to report that the balance was at the wrong side. However, it was a very small amount; and if they could have made up their books two or three days after October 1, the balance would have been on the right side. The balance against the Society was 6*l.* 8*s.* 10*d.* He received 168*l.* for 33 examinations for the licence, as against 115*l.* for 22 examinations in the preceding year; and 111*l.* 6*s.* for 53 Preliminary examinations as against 96*l.* 12*s.* for 46 examinations in the preceding year. There had been a falling-off, although not a large one, in the subscriptions—they had received 80*l.* this year against 94*l.* 10*s.* in the preceding year. He did not know why this should have occurred, for they had been all under the impression that the Society had obtained some popularity by the action that it had taken, and that that should have produced an increase instead of a falling-off in the subscriptions. The balance against the Society was the result of exceptional expenditure, and it was for the members to say how far they were satisfied with the result of the year's operations. The prosecutions had involved a large expenditure, and they had no doubt also involved the Bill; for if they had not instituted those prosecutions in Belfast they would not have had the Bill forced on them by the Chemists' and Druggists' Society. That Bill was law now, and it contained many points which would perhaps work in their favour, and some that they would rather be without. When the former Bill fell through, the feeling of the Council was not to revive it, but to "let sleeping dogs lie"; however, the prosecutions in Belfast roused the ire of the gentlemen of the Chemists' and Druggists' Society. The Bill which had become law contained clauses which were to a large extent beneficial to the Society; and the credit of that was entirely due to the three gentlemen their President, their Vice-President and Mr. Hayes, whom they sent to London to represent their interests. (Applause.) He, as treasurer, had had to deal with all these things as matters of pounds, shillings, and pence. He had a bill from Messrs. Casey and Clay amounting to 80*l.* 6*s.* 1*d.*, and there was also an account of Messrs. Clay and Close for expenses in connection with the Bill in London which had not been furnished yet. The expenses of their representatives who went to London amounted during the year to 88*l.* 3*s.* 5*d.* They had received on account of the Chemical School 8 fees amounting to 25*l.* 4*s.*; and they had paid on account of the school 17*l.* 14*s.* 3*d.*, so that there was a small balance in favour of the school. He then at considerable length referred to the notice of motion he had given at the previous Council meet-

ing proposing to separate the accounts of the school from those of the Society, expressing at the same time his conviction of the necessity of the school since the evening classes of the College of Science had been abandoned. He and others round the board would willingly subscribe any reasonable sum that might be necessary to make up any deficiency if such should occur.

Mr. HAYES moved the adoption of the accounts, complimenting the Treasurer on them, and the President on the attention which he had given to the welfare of the Society. They had passed through a good deal during the past year, but he thought they had come out of the ordeal in a very satisfactory way. Had the Bill which was promoted by the chemists and druggists of the north of Ireland become law in the form in which it passed the House of Commons, that Society would have become a mere name without any substantial position or any government of pharmacy. The Marquis of Waterford was a splendid fellow. Once he had satisfied himself that their demands were justifiable, he never went back until he had accomplished what he put before himself. (Applause.) A writer in one of the journals said that if the Marquis of Waterford was able to learn his lesson in three hours and a half it was a badly-learned lesson. But, although his lordship did, after a three-and-a-half-hours' interview with them, make a speech in the House of Lords, which had the effect of causing the Bill to be sent back to the House of Commons and amended, he received a great deal more instruction than was given in the first two or three interviews with them. He was quite conversant with the whole case, and he certainly did not do anything without having personal knowledge that what he was doing was right. On the whole, he did not think it was a bad Act; and they had great cause for satisfaction in the fact that the matter was now finally settled, and that their opponents of the past would become their friends; and he believed those gentlemen would be satisfied that what they had got was more for their good than what they asked for would have been. Mr. Hayes then described to the meeting the energy with which the President and the Vice-President had worked in London in reference to the Bill.

The VICE-PRESIDENT (Mr. Wells) seconded the motion. He alluded to the number of members returned as the strength of the Society by the treasurer as under eighty, but he thought he could show that the number was 104. Mr. Hodgson had given the number according as the money shows it. But, taking into account that 33 licentiates became members of the Society prior to the last annual meeting, they really had 104 members during the year just closing. It was very desirable that licentiates should support the Society just now, otherwise the election of the Council that time twelve months would be in the hands of the druggists. If the associate druggists came forward and outnumbered the pharmaceutical members of the Society, they would have the election of the Council in their hands. The trials in Belfast certainly cost them a great deal of money; but they were conducted in a very peculiar way. They were brought down to Belfast about six times before they could get convictions. The first time they went down they had six cases, but the magistrates only heard two. The defendants asked to have a case stated, and the magistrates gave them three days to state their point of law. They failed to show that they had any point of law, and, consequently, no case was stated for them. Then they came back six weeks afterwards and got another adjournment. Each time the Society had to send down counsel from Dublin at a cost of about 15*l.* Of course they had got some fines, but it would cost them 80*l.* before they were done with it. As to these proceedings having been the means of spurring on the Amendment Bill, he believed their only effect had been to bring the evil day a little nearer. Mr. Wells proceeded to say that the Society had a nest-egg which Mr. Hodgson had not mentioned. He complimented Mr. Hodgson on the manful way in which he defended his views, and told how warm an interest he had manifested in the affairs of the Society. He was confident the school would be a success. The name of Professor Tichborne would draw pupils—unknown names would not do so. He said this because he firmly believed that the objections of some members of the Society to the school were founded on nothing save the fact that Professor Tichborne has been selected as the teacher in it.

Mr. HODGSON said that perhaps it was a lapse of his not to have referred to the invested capital; but his account showed that the society had on October 1, 1890, in New 2½-per-cent. stock 248*l.* 3*s.* 1*d.*, the amount being the same as last year; and he presumed the auditors were satisfied that he had not sold out the stock and pocketed the money. (Laughter.)

The VICE-PRESIDENT said another thing that should be mentioned was this. When the accounts were balanced last year they were told that they had no further debts then outstanding. A few days afterwards a bill came in for 24*l.* 5*s.* for printing of their calendars, &c. That liability really belonged to last year; and if it had been brought forward in time it would have put a balance on the wrong side for last year, and shown a more favourable account for the present year.

After a few more remarks, the motion for the adoption of the Treasurer's report was put, and unanimously carried.

The next business was the presentation of handsomely illustrated addresses to the President and the Vice-President. The addresses had been prepared by a committee, consisting of Messrs. E. M. Hodgson, William Hayes, C. R. C. Tichborne, Alexander E. Doran, James N. Hardy, and Michael N. O'Donnell, with Messrs. George L. McCormack, and Rodolph A. Burnes, M.D., as secretaries. The illumination was the work of A. M. Lawson, 83 Palmerston Road, Rathmines.

Mr. Hodgson having been called to the chair,

Dr. BURNES said the thought of presenting this address to their President emanated from a remote district in the South, but had been most heartily responded to by the North, East, and West. They hoped he would accept it as an assurance of their good will and appreciation of his services during the last twelve months. Dr. Burnes then read the address, which was in the following terms:—

To Charles Evans, Esq., President of the Pharmaceutical Society of Ireland.

DEAR SIR,—We, the members and licentiates of the Pharmaceutical Society of Ireland, desire to express our high estimation of the very valuable services you, in conjunction with our Vice-President, have rendered to the cause of pharmacy in Ireland by securing, through your untiring energy and ability, the important amendment in the House of Lords of the Pharmacy Act (Ireland) Amendment Bill; and we hope that the Act thus amended may be increasingly beneficial, not only to pharmacists, but also for the convenience and protection of the public. We are thankful to know that the labours and anxieties of the past year have not been more than your strength was able to bear; and we trust that you may have the needful vigour for the duties of the new year, in which we hope, with your continued assistance, the Society may be consolidated. We ask your acceptance of this address in token of our esteem and regard.

After a few words from the chairman, and a suitable reply from the President, Mr. McCormack read the address to the Vice-President, as follows:—

To William F. Wells, jun., Esq., Vice-President of the Pharmaceutical Society of Ireland.

DEAR SIR,—We, the members and licentiates of the Pharmaceutical Society of Ireland, desire to express our high appreciation of the very valuable services you, in conjunction with our President, have rendered to the cause of pharmacy in Ireland by securing, through your energy and zeal, the important amendment in the House of Lords of the Pharmacy Act (Ireland) Amendment Bill, and we hope that the Act thus amended may be increasingly beneficial, not only to pharmacists, but also for the convenience and protection of the public. We hope that under the new constitution you may be able to assist, by your continued counsels to consolidate and perfect the work which you have assisted thus far in accomplishing. We ask your acceptance of this address in token of our regard and esteem.

Another complimentary speech from the chairman, and a grateful and sympathetic reply from Mr. Wells, followed the presentation. Then Dr. Burnes moved, and Mr. Bigges seconded, a vote of thanks to Mr. Hayes, who, it appeared, had declined to receive an address. Mr. Hayes responded, and after some more votes of thanks the meeting terminated.

A TRADE MARK FOR "SPERMIN" has been entered upon the German register of trade marks by Schering's works in Berlin.

EDINBURGH EXHIBITION AWARDS.

THE results of the deliberations of the juries in the British and Foreign Sections were made known on Thursday, October 9, and the same afternoon the Executive Council met under the presidency of Mr. George Stewart, when a vote of thanks was passed to the jurors, and it was "re-mitted to the Jury Committee to prepare an address to Baron De Bush, in recognition of the services he had rendered to the Exhibition." Baron de Bush was chairman of the jurors and gave them much valuable assistance in their labours. The following is a selection of the successful competing firms, British and foreign. Five classes of awards were made, viz.: 1st, diplomas of honour; 2nd, gold medals; 3rd, silver medals; 4th, bronze medals, and 5th, honourable mention.

BRITISH EXHIBITORS.

Diplomas of Honour.

Burroughs, Wellcome & Co., Snow Hill Buildings, London, E.C.—Pharmaceutical preparations.
Fry, James S., & Sons, Bristol.—Chocolate, confectionery, and cocoa.
Pears, A. & F., 71 New Oxford Street, London.—Soap.
Price's Patent Caudle Co. (Limited), Belmont Works, Battersea, London.—Candles, toilet soaps, &c.
Van Houten & Son, Holland.—Cocoa.

Gold Medal.

Armour & Co., Chicago.—Meat extract.
Aspinall, Aspinall & Co., New Cross, London, S.E.—Enamels.
Bovril (Limited), 30 Farringdon Street, London.—Meat extracts.
Clark, E., & Co., Queen's Road, South Lambeth, London, S.W.—Coffee essences.
Fleming, A. B., & Co., Caroline Park, Edinburgh.—Printing and lithographic inks.
Gridley & Co., Bishopsgate Avenue, London, E.C.—Cut isinglass.
Haynes, Geo., & Co., Stockport.—Medicated wools.
Hickissou, J., Bond's Marking-ink, 75 Southgate Road, London, N.—Bond's marking-ink.
Laid & Coffin, 67 Holborn Viaduct, London, E.C.—Perfumery.
Lever Brothers, Port Sunlight, near Birkenhead.—Sunlight soap.
Liebig's Wine Co., 65 and 68 Hightfield Street, Liverpool.—Vino.
Lyons, J., & Co. (Limited), 12 Edmund Place, Aldersgate Street, London.—General excellence of exhibits (inks).
Patent Lead and Zinc White Co., The, Chatham Street, Grosvenor Street, Camberwell, London.—Patent white paint.
Rankin, William, & Sons.—Cork.
Scottish Drug Depot (Limited), Albert Street, Edinburgh.—"White Heather" perfume.
Stewart, George, & Co., George Street, Edinburgh.—Sealing-wax.
Symington, Thomas, & Co., Beaverbank Works, Edinburgh.—Coffee essences.
Wray, W., North Hill, Highgate, London.—Telescopes, photographic lenses, &c.

Silver Medal.

American Camera Company, London.—Detective camera.
Ballard, Stephen, Colwall, Malvern.—Malt vinegar.
Birstow, Jacob, & Sons, Pontefract.—Filters.
Birmingham Vinegar Brewery Co. (Limited), 203 Ashled Row, Birmingham.—Holbrook's Worcester Sauce.
Bonthron & Co., 195 Regent Street, London.—Gluten bread and biscuits.
Bouillon Fleet (Limited), 1 Fenchurch Avenue, London, E.C.—Bee extracts.
Brand & Co., 11 Little Stanhope Street, Mayfair, London, W.—Beef extracts and sauce.
Cannon, B., & Co. (Limited), Gaunt Street, Lincoln.—Sheep dip, &c.
Chinnery & Co., 1 Leadenhall Street, London, E.C.—Portable aerated-water machines.
Coleman & Co. (Limited), Bank Plain, Norwich.—Liebig's extract of meat and malt wine.
Confectioner's Vegetable Colour Co., Hackney Wick, London, N.E.—Colours.
Cyclone Pulveriser (Limited), 134 Palmerston Buildings, Bishopsgate, London, E.C.—Cyclone pulveriser.
Field, C. W., Oldham Place Chemical Works, Liverpool.—Essences.
Hamilton & Co.—Disinfectants.
Incandescent Gaslight Co. (Limited), 14 Palmer Street, Westminster, London, S.W.—Lighting of Burroughs, Wellcome & Co.'s stand.
Jeyes' Sanitary Compounds Co., 43 Cannon Street, London, E.C.—Disinfectants.
Mason, George, & Co., 417 and 419 King's Road, Chelsea, London, S.W.—Beef extracts and sauce.

Monorieff, John, Porth. Writing, copying, and coloured inks.
 Morrell, H., 83 Hatton Garden, London. Writing, endorsement, ticket, and marking inks; gums, sealings, wax, &c.
 Ritchie & Co., Carnoustie Mineral Works, Carnoustie.—Aerated waters.
 Sargol, H., & Co., 10 Radnor's Street, London, E.C.—Perfumes.
 Storey, Joseph, & Co., Heron Chemical Works, Lancaster.—Colours.
 Yorkshire Varnish Co., London.—Varnish.

Bronze Medal.

Glasgow Syrup Packing Co., Maxwell Street, Glasgow.—Syrups.
 Hindes (Limited), 1A City Road, Finsbury, London, E.C.—Brush-making machinery.
 Johnston, Wm. Jackson, Fisher Street, Carlisle.—Non-mercurial plate-powder.
 Kerr & Brown, Forth Street, Edinburgh.—Cod-liver oil emulsion.
 Norvall, S., Wellgate, Lanark.—Soaps.
 Parkinson, R., & Son, Burnley.—Baking, egg, and custard powder.
 Pickering, Joseph, & Sons, Albyn Works, Sheffield.—Polishing paste.
 Pursell, W. G., & Co., 13 Bernard Street, Leith.—Borax.
 Shew, James F., & Co., 87 and 83 Newman Street, London, W.—Cameras, &c.
 Shirley, Arthur W., 55 Farringdon Road, London, E.C.—Menthol cones.
 Thompson, M. F., 97 Princes Street, Edinburgh.—Kola preparations.

Honourable Mention.

Celery Coffee Co., The, 93 Hope Street, Glasgow.—Celery coffee.
 Lipman & Co., Dundee.—Antiseptic dressings.

FOREIGN SECTION.

Diplomas of Honour.

Busch et Cie., Grasse.—Essences.
 Busch et Cie., Messine.—Essences.
 Chassaing et Cie., Paris.—Produits chimiques.
 Chevalier Charles Rognone, Turin.—Produits antiseptiques.
 Oger (Felix Millet successeur), Paris.—Parfumerie.
 Pharmacie Centrale, Paris.—Produits chimiques.
 Roger et Gallet, Paris.—Parfumerie.

MARRIAGE.

[Notices of Marriages and Deaths are inserted free if sent with proper authentication.]

HAMPSHIRE—BUCKLAND.—On September 23, at St. Michael's Church, Handsworth, Birmingham, by the Rev. W. H. Oswald, vicar, Frank Reginald Hampsire, chemist, Sheffield, to Annie Buckland, Handsworth, near Birmingham.

DEATHS.

BUTLAND.—On September 27, Mr. Charles Butland, chemist and druggist, Bridge Town, Totnes. Aged 76.

CATTERNS.—On October 1, Mr. Heneage Parker Catterns, pharmaceutical chemist, late of Church Street, Camberwell. Aged 52.

CROSSWELL.—On October 9, at her residence, 4 Morgan Street, Tredegar, Ann, relict of John Crosswell, chemist. Aged 73.

HIBBERT.—On September 25, Mr. Walter Hibbert, pharmaceutical chemist, New Street Square, Neath. Aged 71.

HOLDSWORTH.—On October 7, at his residence, Park Avenue, Handsworth, Birmingham, Mr. Thomas Wallis Holdsworth, chemist and druggist. Aged 62. Mr. Holdsworth was in business many years since in New Street, Birmingham, but the shop he occupied is no longer devoted to pharmacy. He afterwards founded a wholesale business in Steelhouse Lane, which is now in the hands of Messrs. Crooke & Abraham. He also had a wholesale business in the Priory. Mr. Holdsworth was an active member of the executive of the defunct Chemists and Druggists' Trade Association, and was also a leading member of the Midland Counties Chemists' Association, of which he was president in 1880-81. He was prominent among the Wesleyans of Birmingham, and took a principal part in the work of this body.

PEARCE.—On September 23, Mr. William Pearce, chemist and druggist, New Road, Southampton. Aged 74.

TOWLE.—On October 4, Mr. Edward Thomas Towle, chemist and druggist, Dryden Street, Nottingham. Aged 47.

WOOD.—On September 25, Mr. Joseph Wood, chemist and druggist, Chapel Street, Sheffield. Aged 47.

BANKRUPTCY REPORT.

Re ROBERT FITTON, Wasp Nest Road, Huddersfield, Chemist.

THE public examination of this debtor was taken at the Huddersfield Bankruptcy Court on October 13, before Mr. Registrar Jones. In answer to the Official Receiver's representative the bankrupt said that he had no capital of his own when he commenced business in March, 1887. The shop was furnished for him by his father. He had always personally superintended the business. He had kept a day-book and ledger. The ledger was only a retail one for goods sold over the counter, and did not contain a capital account. He had kept no account of his personal, his household, or his trading expenses. Had balanced his books once since he commenced business, about May or June last. His assets consisted of furniture, stock-in-trade, and fixtures at the shop, book-debts, and one share worth 25s. in the Chemists and Druggists' Association. He had some shares in a building society, but he thought they had been sold. He had no property in reversion. There were many judgment summonses against him, and numerous executions had been issued. He executed a bill of sale to John Whitfield for 400l. on June 3, and obtained about 370l. Most of the goods comprised in it were paid for at the time, but some had been paid for since. Trading accounts he paid with his receipts. His books did not show the receipt of the money nor the way he disposed of it. At the time of the receiving order he had not goods at his shop that had been acquired since the bill of sale, and all were comprised in it. Mr. Whitfield was not related to him. He attributed his insolvency to heavy expenses and competition in trade, and to legal expenses caused by pressure of creditors. He first became aware of his insolvency about a week before he filed his petition. He had not to his knowledge contracted any debts since he became aware of his insolvency. Some of the creditors examined the debtor. He admitted his deficiency to be 2,486l. 3s. 7d. His father lent him 1,000l. with which to commence business, but he had discovered since making out his account that that item was omitted. He had borrowed sums amounting to 545l. (exclusive of the 400l. on the bill of sale), which he had also omitted from the deficiency account. His takings in business for the first year were 1,300l., but the next two years they fell to 900l. each. He could not account for the falling off. His profits were about 15 per cent. His rent was 115l. per annum. He put his net loss on trading at 515l. 3s. 4d. for the three years. In addition to the rent he had to pay an assistant 25s. per week, 22s. a week to a warehouseman, and two boys at 4s. 6d. a week each. He calculated his loss at about 6l. per week, for his expenses were large in comparison with his takings. The rates were very heavy. Though he took stock in June, he did not discover that he was insolvent until August, when Messrs. Armitage & Norton prepared a statement for him. The value of his stock on his failure would be about 750l., but on the recommendation of one of the clerks he wrote a third of it off. The fixtures, plant, and the alterations in the shop cost originally about 850l. He wrote 800l. off for depreciation, and because there were several things that could not be removed. He put down law expenses at 350l. In 1889 he should think he had a dozen writs, and he did not know how many county court summonses. On the day his petition was filed goods at the cost price of 150l. were sold for 90l. His father gave him 1,000l. and lent him another 1,000l. Mr. Mills pointed out that this last statement rendered the deficiency account of less value than ever, and eventually the public examination was adjourned, and the bankrupt ordered to file a trading account and an amended deficiency account.

THE RANK OF PHARMACISTS is rather an uncertainty except where they are associated with some military department. Thus, in the Brazilian army, the pharmaceutical officers are:—One first-class pharmacist (with the rank of lieutenant-colonel), 2 second-class pharmacists (majors), 8 third-class pharmacists (captains), 32 fourth-class pharmacists (lieutenants), and 44 assistant pharmacists (sub-lieutenants).

THE USE OF SCOPOLA ROOT IN THE MANUFACTURE OF BELLADONNA PLASTER.

AMONGST the papers read at the meeting of the American Pharmaceutical Association at Old Point Comfort was one on belladonna plasters, which is of particular interest from the fact that it shows that the root of *Scopola carnioloca* has taken the place of belladonna root to an enormous extent. Mr. Seward W. Williams, the author of the paper, is, we gather from his communication, a chemist to Messrs. Seabury & Johnson, the plaster manufacturers. In the course of his paper he states that as early as 1886 Mr. George J. Seabury, one of his principals, "strongly advocated the use of *Belladonna scopolia*, claiming it to be superior to *Atropa belladonna*." From a table of results which is given we notice that between October 27, 1889, and April 26, 1890, no less than 33,150 lbs. of the root was manipulated for extract. It is interesting to note that scopola root was known by manufacturers to be valuable and was in actual use before its "discovery" by the Research Laboratory staff at Bloomsbury. Mr. S. W. Williams refers in his paper to the series of papers which were read at Bloomsbury Square in the second week of December, 1889, and quotes from them in support of his statement that the scopola root is superior to belladonna root. Some idea is conveyed of this in results of assays made by various workers. Thus

THE ALKALOID IN BELLADONNA ROOT

was found by Dunstan and Ransom to be .35, .38, and .39 per cent. This was in 1889. The same year Simonson, working on the root obtainable in the United States, found a variation from .22 to .75, with an average of .5 per cent. This is a near approach to Dr. E. R. Squibb's results; whereas Dr. A. B. Lyons, in his book on "Pharmaceutical Assaying," reports percentages varying from .47 to 1.52. It is highly probable that some of this variation may be due to difference in the methods of assay; but, however that may be, it will suffice to note that Mr. S. W. Williams, judging from analyses of many tons of the root, is of the opinion that .5 per cent. may be regarded as its average alkaloidal strength.

AS TO SCOPOLA ROOT

he places the percentage at .58, although Mr. Ransom found only .43 and .51 per cent. in two samples. Mr. Williams's figure is based upon experiments with fully 16 tons of the root, in which there was very slight variation. Thus in twenty-seven workings for extracts of the root, using 80-per-cent. alcohol as the menstruum, the average percentage of alkaloid in the extract was 2.358, and the average yield of extract 25.3 per cent. The poorest extract contained 2 per cent. of alkaloid, this being equal to .558 per cent. in the parcel of root worked on, and the best contained 2.6 per cent. of alkaloid. There were three of this strength; one of the three was obtained from a root containing 657 per cent. of alkaloid, and another from a root containing .618 per cent. These figures bring us to the topical question of menstrua; and upon this Mr. Williams had something to say, as the 80-per-cent. menstruum was only adopted after careful investigation. The following figures give the results concisely:—

Menstrum	Yield of Extract from 100 of Root	Percent. of Alkaloid in Extract	Total Alkaloid in Extract
94 p.c. alcohol	13.15	4.10	0.54
80 " "	21.2	2.65	0.56
72 " "	24.50	2.30	0.56
65 " "	27.49	2.00	0.55
50 " "	29.56	1.82	0.54
25 " "	38.46	1.40	0.54

It will be seen from these figures that on the whole the 80-per-cent. alcohol is the best menstruum, although the 72-per-cent. is as efficient, and would do as well for making liquid preparations; but in this case the object aimed at was to obtain a happy medium as regards extracts. It was pointed out that 65-per-cent. alcohol extracts the drug more readily than any weaker or stronger alcoholic menstruum. The drug was in each case treated by percolation, and only

when 65-per-cent. alcohol was used was the whole of the alkaloid obtained in the first three percolates of 50 c.c. each (100 grammes of powdered root being used), although 72-per-cent. was practically equal in this respect. The fifth percolate, with 94-per-cent. alcohol, contained 1.36 per cent. of alkaloid; the fifth, with 80-per-cent., contained 0.47 per cent.; the fifth, with 50-per-cent. alcohol, yielded 1.28 per cent., and the same in the case of 25-per-cent. alcohol. So far we have only touched that part of Mr. Williams's paper which deals with the extract; but the main object of it was to show

HOW THE PLASTER IS MADE,

and we take it that the author is prepared, if necessary, to defend the procedure of calling a plaster made with scopola extract "belladonna plaster." He first deals with the formulæ given in different Pharmacopœias for the plaster. The use of belladonna root for making the plaster was first sanctioned by the U.S.P. in 1870, 100 parts of drug being used for 100 parts of plaster. In the B.P. we now have a similar preparation. French and German pharmacy recognises no such plaster officially. The Spanish Pharmacopœia has a plaster made from 85 parts of extract, 48 parts of belladonna oil, and 320 parts of pitch plaster. In the Swiss, Dutch, and Russian Pharmacopœias it is made with powdered belladonna leaves.

In the process adopted by Mr. Williams scopola rhizome is dried, ground, and sifted through a long rotary sieve, which deposits numbers 40 and 60 powder in separate bins. From 100 to 250 lbs. of the powdered drug are evenly moistened with 80-per-cent. alcohol in a large mixer provided with running stirrer. The moistened drug is packed in tinned-copper percolators, using 40 powder below and 60 above, and allowed to macerate for about twenty-four hours. It is then percolated with 80-per-cent. alcohol, and the percolates evaporated in vacuo to extract consistency. The extract is next sampled and assayed for total alkaloid. The percentage so ascertained is marked upon the large tins in which the extract is transferred to the plaster department, and there the amount incorporated in the mass is apportioned to the assay. For instance, of an extract assaying 2.4 per cent. alkaloid 21 lbs. are used in preparing 100 lbs. of mass.

The more important constituents of this mass are rubber, oilbanum, pitch, &c. The rubber before use in the plaster mass is soaked and steamed, then passed through spirally corrugated iron rolls under a stream of water until well cleansed. The resulting crinkled sheets are hung up to dry and then worked to a perfectly homogeneous mass on warm smooth calender mills. The oilbanum is prepared for use by stamping and sifting. The rubber, resins, and other ingredients are worked with the extract to a uniform mass on warm calender mills. No solvent is employed, the force of the iron rolls doing the entire work. Experiments with benzine as a solvent for rubber, in the early history of manufactured plasters, were most unsatisfactory, the rubber never being itself again, so to speak, after solution. When perfectly mixed, and of just the right temperature, the mass is spread on cloth by means of heavy calenders. The cloth, usually about 120 yards by 36 inches, is fed through the calenders, and, passing under the lower roll, is connected with a large reel behind the machine. The calenders, being gauged for the right thickness, are started, and the mass fed upon the cloth between guides. After standing a time on the reels the plasters are wound on wooden drums, cut, and finished. About 100,000 plasters may be spread per day on one machine. The great advantages of the rubber-combination base, says the author, are its remarkable keeping qualities and permanent preservation of the incorporated medication, as well as its lasting flexibility.

In a previous portion of the paper the author remarks that, notwithstanding the numerous pharmacopœial formulæ for emplastrum belladonna, practically ninety-nine hundredths of our subject properly belong to the manufactured rubber-combination plaster—that is to say, about 99 per cent. of the belladonna plasters used are prepared by manufacturers in rubber combination. If this be true—although we scarcely think it is of the United Kingdom—the necessity for having some recognised alkaloidal strength and method for assaying belladonna plasters is highly necessary; and in the latter portion of his paper the author criticises existing processes and gives the following

APPROVED METHOD OF ASSAY.

"Take two plasters, accurately weigh and digest in 100 c.c. warm chloroform, alkaline with ammonia. Drain the mixture from cloth, precipitate rubber with 50 c.c. of alcohol (94-per cent.), and drain off liquid into a separating funnel, shake with 150 c.c. of distilled water, and draw off chloroform into another separator. Treat the cloth with 50 c.c. alkaline chloroform, washing off the remaining mass, and with this mixture soften residual mass of rubber and gummy matter. Precipitate rubber again with 25 c.c. alcohol. Shake liquid with the water mixture in first separator and draw off chloroform into the second. Repeat softening and precipitation of mass, if necessary, with 25 c.c. chloroform and 12 c.c. alcohol, and pass liquid through first separator as before; further extract liquid in first separator with alkaline chloroform, if necessary, and draw off into second. The chloroform in second separator is then extracted with acid-water, and that, washed with chloroform and afterwards made alkaline, is extracted with chloroform. The chloroform extract, washed by agitation with distilled water, is drawn off and distilled or evaporated. The alkaloidal residue may be dissolved in about 350 times its weight of acidulated water and titrated direct with Mayer's solution, or it may be purified by softening with a drop or two of chloroform, taking up with warm stronger ether and filtering into tared beaker, when it may be evaporated and dried to constant weight."

In the course of his paper, Mr. Williams mentioned that a "simple test" had been proposed for belladonna plaster, which was said to depend upon the solubility of the colouring-matter of belladonna-root in benzene. He had applied the test to samples of plaster made with pure extract of belladonna made by leading American firms, but none of them imparted any colour to the benzene, whereas a plaster which he made with the addition of asphaltum did give a colour. The inference was that if "belladonna plaster" was found which responded to the test, it would contain asphaltum, and probably no extract of belladonna.

Practical Notes and Formulae

PARISIAN FACE-POWDER.

THIS is a preparation composed of equal parts of the finest "crown" zinc white, talc, and magnesium carbonate, with the addition of 2 to 4 drops of otto of rose or the same of oil of orris to each ounce.

TOOTHACHE DROPS.

A NOVEL toothache-tincture is recommended by a Continental namesake of ours. It is composed of 2 drops of pure conine and 8 drops of oil of cinnamon dissolved in 4 drachms of rectified spirit. A single drop of the tincture on cotton wool placed in the tooth is said to give splendid results.

GLYCERINE SUPPOSITORIES.

M. BALLAND communicates the following formula to *Union Pharmaceutique*, stating that the suppositories are not brittle, this being an objection to some made with stearin:—

Lanolin	30 grains.
Glycerine	30 "
Cacao butter	15 "
White wax	15 "

For one suppository.

Melt the lanolin, butter and wax together; add the glycerine and agitate well until creamy, then pour into a mould chilled with ice.

ANTISEPTOL.

THIS substance (iodosulphate of cinchonine) is much extolled as an antiseptic on the Continent just now. It can easily be made, according to Yvon, by adding to a solution of 25 grammes of cinchonine sulphate (3vi. gr. xv.) in a litre of water (say 2 pints) a solution composed of iodine 20 grammes (3v.), and 10 grammes (5ijss) of potassium iodide in 30 oz. of water. A bulky precipitate of the iodo-

sulphate is thrown down, which should be collected on a filter, washed with a little water, and dried. It is soluble in alcohol and chloroform, and as it contains 50 per cent. of iodine, it can be used in place of iodoform, over which it has the advantage of being odourless.

MALE-FERN RHIZOME.

MR. J. B. NAGELVOORT, of Detroit, writing to the *Pharmaceutische Post* in regard to the toxic properties of extract of male fern, gives some interesting figures relating to the filicic-acid and oleo-resin strength of rhizome collected at different periods. The following are his results:—

			Per cent. filicic acid	Per cent. oleo-resin
December, 1883	..	..	0.29	6.0
"	..	..	0.35	8.5
July, 1889	..	..	0.23	5.6
September, 1889	..	..	0.65	6.2
October	..	..	0.24	5.7
February, 1890	..	..	0.23	8.0
"	..	..	0.4	13.0
"	..	..	0.3	11.0
April	..	..	0.22	6.0
"	..	..	0.23	5.7
"	..	..	0.26	6.0

It is remarkable how different the September rhizome is from that collected in other months, and when cognisance is taken of the variability in the amount of oleo-resin it is evident that the filicic-acid strength of the extract will be apt to vary to a far greater extent than the rhizome itself. Something should be done, therefore, to fix a definite standard for the extract, so as to exclude preparations which may be perfectly genuine yet unfit for medicinal use.

ARE LIQUID PEPSINS OF ANY USE?

MR. D. L. HAIGH has been abusing liquid pepsins before the Missouri Pharmaceutical Association. Amongst the things he said, and which will have occurred to many pharmacists, was that among the simple solutions of pepsin which are objectionable are the wine, elixir, aromatic elixir, and elixir pepsin and bismuth. In the last preparation the ammonio-citrate of bismuth is used. To hold this in solution it must be either slightly alkaline or neutral. Pepsin, on the other hand, must be in acid solution, or it will decompose and very likely precipitate. The two substances are therefore incompatible, and the preparation is almost worthless. This is a very simple case. How is it with an alkaloid added, as in elixir pepsin, bismuth, and strychnia? It is known that alkaloids must either be held in solution by means of a solvent—generally alcohol—or be converted into soluble salts by an acid. This last preparation, then, must be neutral to be stable. How long can this be the case with such a loosely constructed salt as ammonio-citrate of bismuth, when the ammonia is constantly being given off? The popularity of pepsin has carried its use to the extreme; although it is an invaluable remedy, like many good things it is abused. The only way to administer pepsin is in the solid form, preferably in powder. The vast number of scale pepsins are for the greater part peptones and do not possess the digestive power of the powdered pepsins. In fact, the highest digestive power pepsins are are not soluble to any extent, which is another very potent reason why this article should not be used in liquid form. There is truth in some of Mr. Haigh's statements, but he has not carried his inquiries far enough. Liquid pepsins can easily be made which possess high digestive power. For years we have pointed out that the minimum amount of alcohol should be used for the preservation of these preparations, as alcohol in certain amount precipitates the ferment. Mr. Haigh appears to overlook the fact that the pepsin ferment is a soluble body. We have no evidence that it is insoluble in alkaline media; the question is, is it desirable to administer it in such media? We know that in that condition it is inactive, but how long will it remain alkaline in the stomach? That there is great ignorance regarding pepsin is evidenced by the fact that some time ago a medical journal, whose opinion is highly valued, stated that they had tested one of the pepsin preparations which Mr. Haigh objects to, and from the amount of starch which it converted, they had been led to form a high opinion, &c. The manufacturers actually advertise this testimonial!

REGISTERED **"SANITAS"** TRADE MARK.
IS THE IDEAL AND MOST RELIABLE
DISINFECTANT,
And is most used in Antiseptic Surgery.

LARGEST SALE IN THE WORLD.

The Trade, in their own interest, should stock all our "SANITAS"
Fluids, Oil, Powder, Soaps, Toilet, and Veterinary Preparations.

KINGZETT'S BACTERICIDES

AND
PATENT PRESERVED PEROXIDE OF HYDROGEN

THE SANITAS CO., BETHNAL GREEN, E.

SHOW CARDS, 24×17 or 17×12,
Free to any Address in the United Kingdom.



See First Page, facing inside of front of Cover, in the
first issue of the month for latest particulars.

Noakes' Tincture
for Druggists' use.

Write for Price
List No. 14.
B. NOAKES & CO
Dockley Road,
Bermondsey, London

UMNEY'S CINCHONA
ERGOT
CASCARA
FLUID
EXTRACTS.
MALT & C.

PRICES CURRENT
ON APPLICATION.
**WRIGHT
LAYMAN
& UMNEY.**
SOUTHWARK,
LONDON.

PATENTS AND TRADE MARKS.

W. P. THOMPSON & CO., F.C.S., M's I.M.E., &c.
6 Lord Street, LIVERPOOL; 6 Bank Street, MANCHESTER; Angel Row,
NOTTINGHAM; and 323 High Holborn, LONDON, W.C., Chemical and
General Patent and Trade Mark Agents.
MANUALS OF INSTRUCTIONS GRATIS.

**SILICATED CARBON
FILTERS**

PATENT SELF-AERATING
MOVEABLE BLOCKS
WORKS, BATTERSEA LONDON. S.W.

**MOSS'S
CASCARA**

IN ALL FORMS.

**SELECTED MATURE BARK
AND PREPARATIONS.**

Through Wholesale Houses, or direct from

JOHN MOSS & COY

Makers of Galenicals and Medicinal Chemicals,
Galen Works, Wilson St., NEW CROSS ROAD, S.E.

CAUTION!

IMITATIONS OF JEYES' CREOLIN GAUZE

Are being offered which
entirely fail to answer the purpose for which
the gauze is used.

These imitations are only half the weight of Jeyes' and are almost
entirely non-absorbent,
and therefore worthless.

Chemists are warned against purchasing any gauze not
bearing the name of

JEYES' SANITARY COMPOUNDS CO. (LIM.),
43 CANNON STREET, LONDON, E.C.

MUMFORD'S

(FARRINGTON ROAD, LONDON, E.C.)

PURE CRUSHED LINSEED,

In 1-cwt. and ½-cwt. Bags, 19/- Cwt.,

Or in 14-lb. and 28-lb. Bags, 20/- Cwt.;

PURE STARCH POWDER,

In 56-lb. bags, 26/-,

Or in 7-lb., 14-lb., and 28-lb. Bags, 28/- Cwt.,

CARRIAGE PAID [2]

to Railway Stations in England, or half to stations in Scotland, Ireland,
and Wales, on parcels of a total weight of not less than 1 Cwt.

MAKE YOUR OWN TINCTURES, INFUSIONS, AND SYRUPS WITH

*Fletcher's
Concentrated Liquors*

EDITORIAL NOTES.

AMENDING THE PHARMACY ACT.

We have several times commented on the strange refusal
of the majority of the Pharmaceutical Council to give any-
thing like substantial reasons for objecting to include in
their amending Bill a clause dealing with the admitted
mischief in pharmacy of qualification by registration under
the Joint-stock Companies Acts. That such a simple

process of becoming a chemist and druggist should be possible is ludicrous—almost incredible to people of ordinary capacity; and yet even more astonishing is the fact that the body specially concerned in maintaining the potency of the statute—the men who directed the costly lawsuit which ten years ago established the deficiency in the Act to which we refer—should have taken no serious step since to recover the position which, it is not disputed, Parliament intended to give to chemists and druggists. In the time which has elapsed since the trial, the Council has brought forward half-a-dozen draft Bills, aiming at more or less important modifications of the law affecting pharmacy, but only in the first of these, which was never brought before Parliament at all, have they even hinted at a rectification of the statute as regards companies. And hitherto, as we have said, the majority responsible for this forbearance have scarcely deigned to give any exposition of their policy in this respect. "*Parceque c'est mon bon plaisir*," was the Bourbon's reply to any request for an explanation, and the same reason has been apparently thought sufficient by the Bloomsbury gentlemen. But at the last meeting of the Pharmaceutical Council, we are glad to see, a direct challenge compelled them to offer something which should look like reasons for their apathy. It will be our business in this and in a succeeding article to analyse the arguments then put forward for what seems to us to be the neglect of a paramount conservative duty.

On Mr. Carteighe devolved the chief burden of the defence; the range of his argument was like Sam Weller's knowledge of London, "extensive and peculiar," but we question whether his most loyal supporters can be implicitly relied upon to follow him this time with the usual steadfast confidence. They certainly will not do so if they can be induced to check his statements, for it is safe to say that more unreliable and inconclusive arguments were never offered to intelligent men.

The President began by endorsing the absurdly inaccurate assertion made by Mr. Cross that the Act of 1868 was "merely a Poisons Act," and later in his speech he alluded to the same Act as "that poor wretched Poisons Act." We are so dense as not to appreciate the relevance of this argument to the matter under discussion, even if it were correct, which it is not; but as a statement it is worth remembering. We will return to it subsequently, and will easily prove that the Pharmacy Act of 1868 was something very much more than "a mere Poisons Act." For the moment, however, we content ourselves with observing that, poor wretched Act as it may be, it at any rate compares favourably in substantiality with the numerous bursted bubbles which alone stand to the credit of Mr. Carteighe's administration so far.

The speaker next stated that in the early years after 1868 the Pharmaceutical Council took the opinion of a number of legal authorities as to their prospects of success if they ventured on a contest with the company dispensers then springing up. Those opinions, he says, are all in the archives of the Society, and they are one and all to the same effect: "You cannot succeed." We know something of this matter ourselves, and we ask, in entire good faith, "Did not all those opinions (if there were several) refer to co-operative associations?" If that is the case—and we believe it is—this is another argument of absolutely no relevance. We are not now concerned with genuine co-operative associations, but with companies incorporated simply and explicitly for the purpose of evading the Pharmacy Act.

But what is the purpose of raking up these old consultations, anyway? We all know that, under the present Act, we "cannot succeed" against the companies. We have six deadly judgments against us. These are far more formidable

than any counsel's opinions. And it is just because of these judgments that we want the Act amended.

A favourite trick of debate with Mr. Carteighe is to dilute the contention of his antagonists with others of less force, and then reply to the lot in general terms. "I am asked," he says, in effect, "on every hand to demand from Parliament protection in this, that, and the other form. Some want protection in prices, some want protection in their packed-goods trade, some want protection from stores, and so on. Nothing could be easier for me than to draft a Bill to fulfil all these requirements; but, gentlemen, I should be unworthy of the position I hold if I did not at once tell you that it is perfectly hopeless to expect that any Parliament will grant any such privileges." Dress up that sentence with plenty of verbiage, throw in a sneer at "newspaper articles," and assume an impressive solemnity of manner, and you have what we suppose the President himself refers to as one of his stock arguments. Surely it must be obvious even to the most faithful that it cannot be an answer to one argument to reply to something quite different.

We will quote from Mr. Carteighe's speech a fourth specimen of untrustworthiness. He alluded to the Irish Act passed last Session to enforce a contention that if you go to Parliament for one thing you may very likely get something quite different to what you want. "Look at that Irish Act," he says: "every one of its clauses was completely transformed and made something else of before it passed." This is simply an astoundingly mythical statement. The Act is in essence exactly what was asked for. "With two exceptions," said Mr. Brunner in this journal on August 23 last—and he showed that those two points were of trivial importance, and of no bearing on the principle of the measure—"with these two exceptions, the Bill as it stands [when it received the Royal Assent] is practically identical with the one which was thrashed out last year." On whom does Mr. Carteighe expect to impose by such rubbish as this illustration?

Here, then, are four of the President's so-called reasons for not endeavouring to deal with the company mischief demonstrated to be rotten. We will consider what remains of his argument next week.

KOBERT ON ERGOT.

THERE are few drugs which have the complexity of ergot, and none which modern pharmacy has made so little impression upon as that useful drug. A year or two ago we had occasion to refer to a dispute which was then creating some attention, and it was at that time pointed out that probably no single body contained in ergot could be said to produce the complete physiological symptoms of the drug. Some fresh light is thrown upon the subject, especially regarding pharmaceutical preparations of ergot, in a paper by Prof. Kobert, of Dorpat, one of the greatest living authorities on the subject. According to Kobert, there are five principles which have been claimed as the active principles. He has made clinical and physiological experiments with some of them, and the purpose of this note is to convey briefly the results at which he has arrived. First in regard to these principles. The first which may be noted is the ergotinic acid of Zweifel, called sclerotinic acid by Dragendorff, and by Wenzell ergotic acid. This body, according to Kobert, has little or no action upon the uterus, but it often produces disagreeable effects, and is extremely expensive. Next, we have the picrosclerotin of Dragendorff and Podwyssotzki and the isocholin of Brieger, but nothing is known concerning the therapeutical action of these. A fourth body is sphacelinic acid which is an acrid and poisonous resin. It certainly pro-

duces part of the medicinal effect of powdered ergot; but it has not yet been tried in the pure state, and may, with advantage, be replaced by the body which Kobert calls cornutine. This is the most active constituent, and can be easily extracted from ergot in the following manner:—The drug is exhausted by means of water acidulated with hydrochloric acid, the aqueous solution nearly neutralised by sodium carbonate, then evaporated in vacuo at a very low temperature to a syrupy consistence, and treated with 95 per cent. alcohol. The alcohol is removed from the liquid after filtration by careful distillation, and the nearly dry product is treated with anhydrous ether, which removes any ergotin present. After making the residue alkaline with sodium carbonate, it is treated with acetic ether, and the solution of cornutine so obtained is shaken with water containing a little citric acid, which removes the cornutine in an almost pure state. This process is then repeated, and the cornutine dissolved in acetic ether, the solution concentrated, and finally the substance is precipitated in the pure state by means of anhydrous ether, which retains in solution any remaining traces of ergotin. Cornutine so prepared, will, if kept dry and not exposed to light, remain unchanged. Kobert has kept some for three years, and it has not suffered any deterioration.

A very interesting part of the monograph is that in which the author criticises the various official and popular preparations of ergot. He is quite correct in saying that the pharmacy of ergot is at present in a state of "wild confusion," but it is noticeable that two main lines are recognised: in the one case it is attempted to have only one active principle present in a pure state; in the other the desire seems to be to include every constituent which is believed to have any medicinal effect. All ergot extracts in European Pharmacopœias are based upon the process first used by Bonjean in 1842—viz., exhausting the drug with plain water; but Kobert thinks that the fluid extract, prepared according to the directions of the United States Pharmacopœia, approaches, when fresh, most nearly to the natural drug; and it so happens that this is the only one which has a hydrochloric-acid menstruum. This process the German Pharmacopœia has also recently adopted. But no matter how the extracts are made, or what they are called, they all agree in losing their activity in a very short time. Kobert examined a great many of these extracts, and found that in as short a time as nine months they became practically valueless. Neither sterilising nor the use of antiseptics can protect a watery preparation from change, as it is due not only to fermentation and the presence of bacteria, but to independent chemical decomposition, partly of the nature of oxidation. He has also arrived at the conclusion that water is the worst solvent that can be used, as the active principles decompose in it very rapidly; indeed, the strength of an extract depends very largely upon the length of time during which it has been in contact with water—a fact which many have doubtless observed who have had complaints about the failure of liquor ergotæ which has been in stock some time. The only way, according to Kobert, to obtain a reliable extract containing the chief active principles cornutine and sphacelinic acid, is to treat powdered ergot with petroleum ether in order to remove oil, and then exhaust with rectified spirit. This tincture is then evaporated until 15 grains of it represent 150 grains of the ergot employed. Kobert in his paper gives results which he has obtained clinically with many liquid extracts and also with ergotin pills, and in every instance they failed to produce anything like the effect which freshly-powdered ergot produced. Amongst these was the British Pharmacopœia liquid extract, which was found to be unreliable; while

several kinds of ergotin were also comparatively valueless for the reasons stated. Hitherto ergotin has generally been made from aqueous infusions or percolates by evaporation, precipitation of earthy phosphates and albumen with alcohol, and evaporation to pilular consistency. Kobert believes, however, that all such preparations are wrong in principle, and that if we are to produce an ergotin showing the minimum amount of change his alcohol process must be employed. But he repeats the advice which so many old physicians have given—that to ensure prompt action, and exclude possibility of failure, freshly-powdered ergot should be administered. And not only must it be freshly powdered, but it should be not more than a year old, as after a year the drug contains but small quantities of cornutine and sphacelinic acid. Various proposals have been made from time to time regarding the preservation of the drug, and amongst them the extraction of the fixed oil was regarded as perhaps the most important. Seven years ago, Mr. John Moss advanced proof of this, in a communication to the British Pharmaceutical Conference, wherein he showed that ergot, freed from its oil by hydraulic pressure, retained its therapeutic properties for six years. Kobert entirely disagrees with this view, with, however, the reservation that if the powder is kept absolutely free from water its activity may be preserved; but he prefers to keep the drug whole, in air-tight vessels, and perfectly dry. The rules which he lays down are indeed somewhat stringent, and he is inclined to be opinionative; but for all that his monograph shows good work, and the advice which he gives regarding the preparation of the liquid extract is of the highest value.

THE SCARCITY OF ORRIS ROOT.

THE Italian orris-root crop, which was gathered about two months ago, has now all been prepared and dried, and shipments of it have reached the great consuming markets. The slight hope that prices might somewhat recede from their elevated position of the last two or three years after the harvesting of the present crop has not been at all realised; in fact, the best Florentine orris is dearer now than it has been for the last thirty years or more. Between 1860 and 1870 the normal price of the best root just after the harvest fluctuated between 30s. and 40s. per cwt., and only exceeded the latter figure on one or two occasions. During the next decade prices ruled much higher, and we believe we are right in saying that in the seasons from 1871 to 1877 the drug reached the figure nearest approaching its present value, the quotation for the best orris in those years being between 70s. and 80s. per cwt. After that prices again receded under the influence of a succession of abundant crops, and during this era of cheapness the employment of orris in perfumery appears to have been greatly extended. But during the last three years prices have again been uniformly high. The principal cause of the present scarcity and dearth of the drug appears to be traceable to the floods which about three years ago destroyed a considerable proportion of the orris plantations. The principal of these are situated around Pontassieve, a small town to the east of Florence, in Central Italy, and most of the root is brought into commerce *via* Leghorn, the nearest port of shipment, in very large casks, containing about 10 cwt. of the dried rhizome. The orris plant is an easy one to grow, and, in fact, prefers a sterile and dry soil, the best root being obtained from plants grown against the walls which protect the terraced fields on the Tuscan hill-slopes. But the plant is a very exhaustive one for the soil, and cannot be grown with other crops; moreover, the root does not become fit

for gathering until its third year. After 1888, when the advance in the price commenced, the cultivation of the root, which, strange to say, had until then been almost restricted to the neighbourhoods of Pontassieve and Arezzo, around which latter town the farmers grow the plant in fields, was extended to other parts of Italy, and largely increased in Tuscany itself; but from the plants then reared no root will be available for commercial purposes until the autumn of next year. Then, in all probability, we may expect a more liberal supply than is now available. One of the places where orris-growing has been commenced, and where considerable hopes appear to be entertained of the creation of a successful industry, is Reggio, in Calabria, in the south of the country. There is every prospect that a more extensive cultivation of the drug, although it will necessarily have the effect of reducing the price in a considerable degree, will at the same time greatly stimulate the use of the article, which it is thought might be doubled or trebled if permanent cheapness could be depended upon, especially as the present taste in perfumes favours the use of violet odours. The greater part of the Italian orris crop, we believe, is consumed in France, some firms in Grasse and Paris being known occasionally to place contracts for 20 or 30 tons of Florentine root. Much of this root is used for distilling purposes, the product resulting being a compound of myristic acid and true essential oil of orris. This oil of orris, the employment of which appears to have expanded considerably during the last few years, is of a rather thick consistency and orange colour. It has an exceedingly penetrating odour, rather too strong to be described as resembling violets. It is stated that the finest Florentine root only yields one-thousandth part of its weight of this oil by distillation; and as one firm in Germany alone claims an annual consumption of at least 20 tons of root for distilling purposes, and the French imports amount to an aggregate of probably not less than 100 tons, some idea of the annual production of orris in Italy may be obtained, taking into account the fact that England, and next to her the United States, are also considerable purchasers of the article. The French buyers claim that the present price of the Florentine root is prohibitive of its use for distilling—75s. per cwt being the most they can afford for that purpose; but, as a matter of fact, neither the ordinary Verona root, which is collected in the north-east of Italy from a variety slightly differing from the *J. pallida*, Lam., which yields the Florentine root, nor the still commoner orris which is exported from Mogador to the extent of perhaps 10 to 15 tons per annum, are at all suitable for use by oil-distillers, and they will therefore have to continue using the Florentine root, or temporarily suspend the distillation. Meanwhile there appears to be very little prospect that lower quotations will rule until next year's crop comes in, while there is a good deal of evidence that they may still advance to any extent to which it is possible to raise them without curtailing too seriously the use of the article. The Florentine merchants appear to be so convinced of the safe position of the article that even the local dealers who manufacture the orris ornaments and beads largely used in Italy, and who generally sell their refuse and turnings at a price much below that of the entire root, are unwilling to part with any of their stock under the present price of the best root. Towards the beginning of August, 1891, we may expect to be in possession of reliable news of the yield of the coming crop; but the orris, then freshly cut, will not be ready for shipment until six or eight weeks later, as it has to undergo a lengthy drying process, during which its odorous principles are created, the fresh root being quite devoid of odour.

THE BANKRUPTCY ACT REPORT.

FROM the report for 1889 just issued by the Board of Trade in reference to the Bankruptcy Act it appears that the total amount of liabilities and of estimated losses arising from insolvency of all kinds throughout the country continues steadily to diminish, the decrease under the latter head for 1889, as compared with the preceding year, being 820,424*l.*; and as compared with the last year of the 1869 Act, 9,012,989*l.*, exclusive of losses under private arrangements in the latter year, which must have been very considerable. The Inspector-General, in discussing the working of the Act, remarks that it has now been in operation for over six years, and that its effects can therefore be now more fairly estimated than in the year or two immediately succeeding its adoption. That it seems to have had a permanent effect is clear from a number of figures quoted. Six years after the passing of the 1849 Act there were 10,614 insolvencies gazetted; at the same interval after the 1861 Act the annual crop was 15,906 insolvencies; the 1869 Act yielded 7,889 in 1875, and under the 1883 Act in 1889 only 4,520 were returned. The liabilities in 1875 were 25,533,644*l.*; in 1889 they were only 6,328,293*l.* It is impossible to say in the absence of statistics whether this great reduction is largely due, as has been alleged, to the increase of private arrangements. But certainly it is not entirely due to these. There were private arrangements in 1875 of unknown extent. In 1889 these were registered, and the total amount of liabilities under them did not amount to five millions sterling.

In his report the Inspector-General defends his department against the charge which has been often brought against it of extravagant cost of realisation of assets. He shows first the costs of realisation of all the estates wound up from 1884 to 1889. The costs of realisation of estates with assets under 50*l.* were 77.49 per cent. by official receivers and 112.76 by non-official trustees; in estates with assets of from 50*l.* to 300*l.* the comparison was 34.30 per cent. with 49.39 per cent. in favour of the official receivers; in estates with assets of from 300*l.* to 500*l.* the costs of realisation by official receivers were 24.04 per cent., and by non-official trustees 35.24 per cent.; and with assets of from 500*l.* to 1,000*l.* the official receivers' costs were 22.85 per cent., while the private trusts cost 28.09 per cent. He also gives figures to show that official realisation is much more effective than private trusteeship.

Gazette.

PARTNERSHIPS DISSOLVED.

Cliff, D. Y., & Cliff, C. (under the style of J. Cliff & Sons), Runcorn and Leeds, chemical apparatus manufacturers and fire-brick merchants.

Jones, W., Jones, J. A., Leese, N., Adkins, W., & Taylor, J. (under the style of Jones Brothers & Co.), Stoke-on-Trent, oil and chemical manufacturers; as far as regards J. A. Jones.

Jones, W., Leese, N., Adkins, W., & Taylor, J. (under the style of Jones Brothers & Co.), Stoke-on-Trent, oil and chemical manufacturers; as far as regards J. Taylor.

Turner, W., & Garner, W. H. (under the style of Turner, Garner & Co.), Manchester, wholesale chemists and druggists.

THE BANKRUPTCY ACT, 1883.

Angus, John, Darlington, surgeon-dentist. R.O. - Adj.

ECONOMICAL APPARATUS.

BY WALTER H. INCE, PH.D.

PIECES of apparatus which can be easily made and cost little for material are always in demand by those who have either limited incomes or who are at a distance from large business centres.

The following are descriptions of apparatus which can be made by anyone who possesses a certain amount of ingenuity or mechanical skill. They are by no means to be regarded as temporary makeshifts; on the contrary, many of the pieces described may form trustworthy adjuncts to the furniture of the laboratory. A very little trouble expended may render them quite presentable.

BLOWPIPES.

A blowpipe for ordinary use may be made by boring a sound cork laterally three-quarters of its length, and then boring another hole transversely to meet the first in the centre. At the shorter hole place a jet made of hard glass tubing drawn to a point, and at the other a longer, piece of soft-glass tubing, having the end smoothed by holding in the flame of a Bunsen burner (to avoid cutting the lips), and a bulb blown as shown (fig. A) to condense the moisture of the breath.

A burner to be used for this blowpipe may be made by partly closing the extremity of a piece of hard glass, as

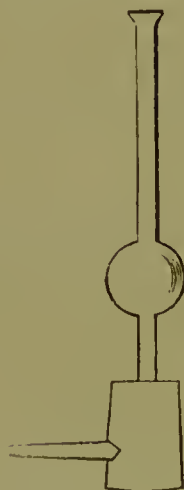


FIG. A.



FIG. B.

shown in figure B, attached to an ordinary gas-jet by a piece of indiarubber tubing.

A Herapath blowpipe, to replace the use of an air-

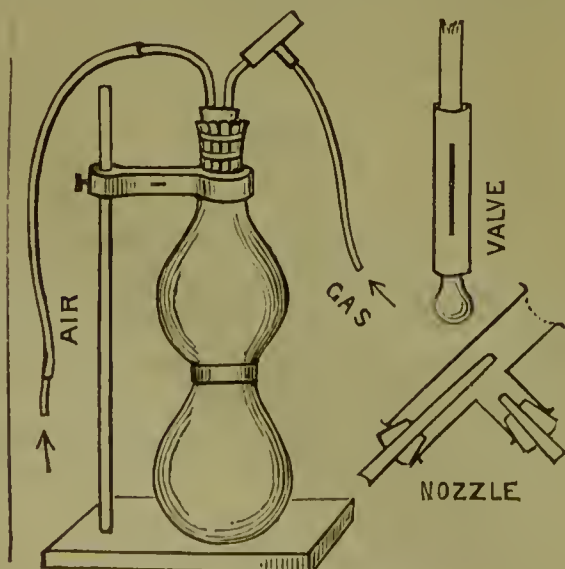


FIG. C.

bellows, may be constructed by taking an ordinary bladder—which has been rendered pliant by rubbing with sweet oil

—and placing an indiarubber ring round the centre of it, as shown in the following figure. In the mouth of the bladder a large cork, bored with two holes, is firmly tied. Through one of the holes a long glass tube is placed, reaching to the bottom of the bladder and fitted with a Bunsen air-valve. This air-valve can be made by taking a stout piece of indiarubber and carefully slitting it about an inch lengthwise in the centre with a sharp knife. (One end is then drawn over the end of the glass tube, and the other closed with a piece of glass rod: this allows the air to enter the bladder, but prevents its exit. At the other hole in the cork is placed either an indiarubber tube leading to a blowpipe, or the blowpipe itself fitted on a piece of bent tube. The nozzle can be made by fixing to an ordinary brass T-piece, by means of a cork, a tube for the blast of air, and at the other opening, at right angles to it, a similar, but slightly larger, tube for the gas. The indiarubber band in the centre of the bladder is to give it elasticity, and acts in the same way as the indiarubber sheeting in the ordinary foot bellows. If a wide jet for the air-supply be used with low pressure on the bellows, lead glass may be very easily manipulated with this form of blowpipe, and will not be found to blacken. If a fair pressure of water is at hand a good blower may be made as follows:—A small bulb is blown in a piece of glass

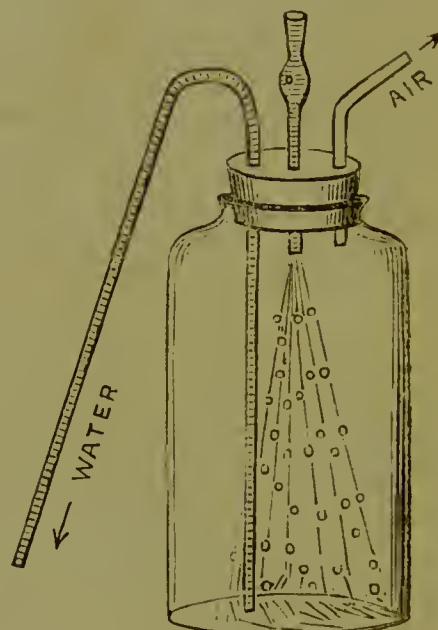


FIG. D.

tubing about six inches long; this is pierced in the upper part by carefully heating with the fine point of a blowpipe-flame, and then sharply blowing. The tube above the puncture is then slightly narrowed. A large wide-mouthed bottle is next taken, and fitted with a cork bored with three holes. In the centre one the above tube is placed, connected with the water-supply; in the second, a tube leading to the bladder reservoir; and, in the third, a bent tube reaching to the bottom of the bottle, so as to act as a syphon. The water passing through the centre tube draws with it air, which is forced into the reservoir, while the water is carried off through the syphon. If the water-supply be not at hand, the lungs may be saved by filling the bladder by means of an ordinary kitchen bellows.

BUNSEN BURNERS.

The simplest of this class of burners may be made by bending a bit of ordinary glass tubing at right angles, and nearly closing one of the extremities. This is then inserted into a small cork bored in the centre and notched at the sides, over which a slightly larger tube of hard glass is fixed. The free end of the tube may be supported on a large cork, or fixed into a cork supported on a glass funnel (see fig. E). Another very simple burner to be attached to an ordinary jet may be made by winding stout brass wire round a tube slightly larger than the gas-jet, so as to make a coil about 2½ inches long; the inner core is extracted, and one end of the coil fixed over the burner, as shown in figure F. Instead of the brass coil a piece of brass or glass tubing

may be fixed over an ordinary burner by means of two small wedges of cork at the lower extremity, allowing space enough for the air to enter at the sides.

An Argand burner may be made by filing slits in a hollow

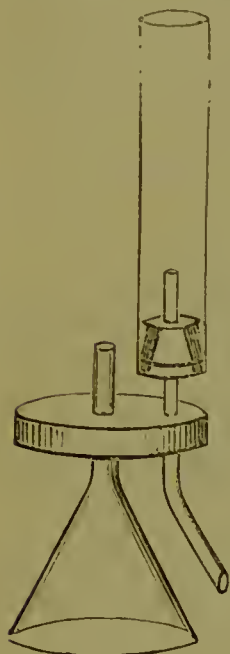


FIG. E.



FIG. F.

brass door-handle at regular intervals, and attaching it to the gas-supply (fig. G). An ordinary portable gas-jet forms a good starting-point for these burners, and may be obtained for 1s. or 1s. 6d. from any gasfitter. In lieu of this, a brass rod at the top of which a jet has been screwed may be placed in a bottle fitted with a cork with two holes; in the other hole an elbow tube is fitted for the supply of gas. The bottle is three-quarters filled with lead shot or sand to make it steady (see fig. H).

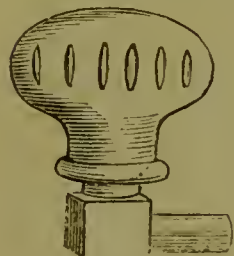


FIG. G.

A spirit lamp is easily constructed by placing a bored cork in a wide-mouthed bottle; in the aperture a piece of glass tubing is inserted (fig. I), forming a wick carrier, and the whole is rendered air-tight when not in use by placing a wide test-tube over the cork. A small hole must be drilled



FIG. H.



FIG. I.

in the cork, by means of a red-hot needle or wire, to allow air to enter the bottle and replace the spirit consumed. The application of stout tinned iron or brass wire is practically unlimited in the construction of laboratory apparatus. A

pair of flat and round-nosed pliers with a file are all that is required for manipulating it. The formation of a Bunsen burner (fig. F) has already been described. The following are

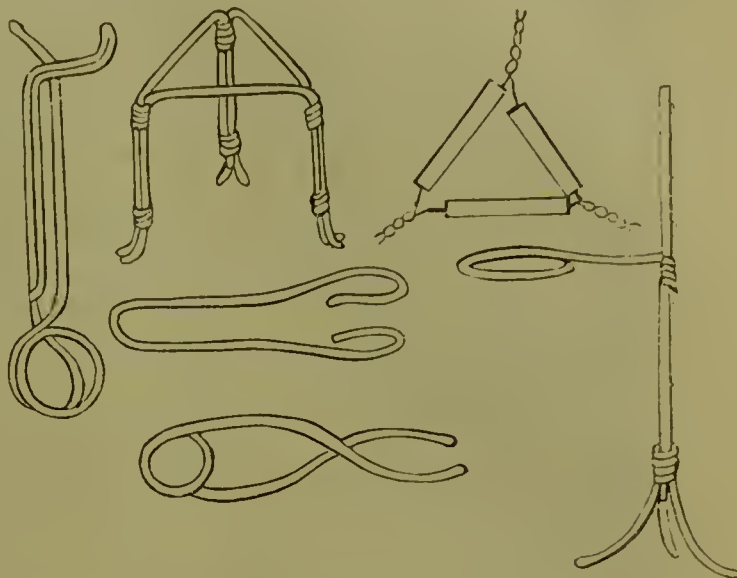


FIG. J.

hints which may be expanded at pleasure. Pinch-cocks, tripods, watch-glass holders, pincettes, test-tube holders, filter rings may be mentioned among the many useful things which may be made from wire, as shown in the figures given above.

A NEW YORK PHARMACEUTICAL EXAMINATION.

MR. ARTHUR NICHOL, who had been apprenticed to the drug trade in this country, writes to us from Haverstrau, in New York State, U.S. He has had rather less than twelve months' experience in American pharmacy, and likes it. The hours are rather longer than at home, but the pay is better, and there are more hopeful prospects for the future. He finds no prejudice against an Englishman in the drug trade. Haverstrau, where he is located, is the largest brick-making village on the Hudson, and supplies New York with five to seven hundred millions of bricks annually. Last August, Mr. Nichol says, he felt a desire to obtain the State Board pharmaceutical certificate; so, having filed his application, he proceeded on the 31st of that month to a place called Yonkers, on the east bank of the Hudson, where the examination was held, about 18 miles from New York.

Arrived at the examination room, he was met by the examiner in charge, and a lot of young fellows on the same errand as himself. He was soon made to feel at ease by the courtesy of the examiner, a Mr. Brown—a tall, gentlemanly man of kindly countenance. I was unaware, writes Mr. Nichol, whether it was to be an oral or written examination, but was soon satisfied on this point by being handed a paper, and told I could begin at once if I so chose, although it was only 9 A.M., and the examination was set for 10 A.M. Reading the paper I found it to contain the appended questions:—

PHARMACY AND MATERIA MEDICA.

1. Give weight and volume of the units of the metric system and equivalents in apothecaries' system. How many milligrams in 1 grain?

2. Phosphoric acid, U.S.P., contains 50 per cent. orthophosphoric acid. The dilute contains 10 per cent. How much acid will 14 oz. of phosphoric acid make? How much dilute acid will 9 oz. of 84-per-cent. acid make?

3. Source of following acids:— $\text{HC}_2\text{H}_3\text{O}_2$, $\text{C}_6\text{H}_5\text{OH}$, $\text{H}_2\text{C}_6\text{H}_5\text{O}_7 + \text{H}_2\text{O}$, HCN , $\text{H}_2\text{C}_2\text{O}_4 + 2\text{H}_2\text{O}$, $\text{HC}_2\text{H}_3\text{O}_3$, $\text{H}_2\text{C}_4\text{H}_4\text{O}_6$.

4. From what and how is alcohol made? Process.

5. Do fluid extracts represent definite proportions of the drug and what proportion? Answer same for solid extracts.

6. From what and how is liquor plumbi subacetatis made?
7. How much opium of 12 per cent. morphine strength will be equivalent to $7\frac{1}{2}$ oz. of 14 per cent. strength?
8. Proportion of sugar and water in syr. simplex, U.S.P.?
9. The U.S.P. requires tr. nucis vomice to contain 2 per cent. by weight of drug extract. Having tr. prepared we evaporate 100 gr. and find it contains $2\frac{3}{10}$ gr. of dry extract. How much menstruum should be added to 16 oz. (av.) of the tr. to bring it to the required standard?
10. What is the proportion of alcohol in sherries, whiskies, wines and brandies?
11. Apocynum. Common name, medicinal properties, habitat, and with what other drug is it liable to be confounded?
12. What part of the plant do the following represent: Colocynth, copaiba, dogwood, saffron, ladies' slipper, foxglove, elaterium?
13. Yellow jasmine.—Official name, part of plant used and official preparations.
14. Aspidium.—Synonym, part used, habitat, medical properties, and official preparations.
15. Common name of the drugs from which the following alkaloids are obtained:—Atropine, codeine, macrotine, daturine, strychnine, hydrastine.
16. What is guarana? How prepared? Official preparations and doses.
17. Oleum theobromæ.—What obtained from? Principal uses in medicine. Is it a volatile or fixed oil?
18. What is copaiba, U.S.P. How obtained? Medicinal properties.
19. Hydrastis.—Common name, official portion and official preparations.
20. Crude drugs. Twelve varieties for identification. (They were, if I remember correctly, ergot, senna, resin, spigelia, aconite, prickly ash, squill, gamboge, cinchona r., buchu, slippery elm, cascarrilla.)

CHEMISTRY, TOXICOLOGY, AND DOSES.

1. What is meant by analysis? By synthesis?
 2. What acid and base unite to form each of the following salts: Epsom salts, sugar of lead, Glauber salts, sal soda, blue vitriol, sal ammonia, copperas, Paris green?
 3. From what are the following alkaloids obtained: Nicotine, narcotine, brucine, eserine?
 4. What do the following formulæ represent: KCl , $AuCl_3$, $AgNO_3$, $NaCO_3$, K_2CO_3 ?
 5. What is spirits of mindererus? How made?
 6. R.—

Quinina sulph. ...	5j.	} What is the chemical incompatibility in this prescription, and what would be the precipitate?
Aquæ puræ ...	3ij.	
Spt. ammon. aromat. ...	3ss.	
Elxir. simplicis qs. ad.	5iv.	
 7. What is the precipitate formed when a solution of potass iod. is added to a solution of hydrarg. bichlor.?
 8. What is the object in adding acid dilute acetic in Basham's mixture?
 9. What is the source of iodides and bromides?
 10. Chemical names of soluble glass, lunar caustic, and common salt?
 11. Register the sale of 3j. of strychnia.
 12. Which of the following should be registered when sold (in New York State): Arsenic, sugar of lead, oxalic acid, opium, Paris green, sulphuric acid, saltpetre, aconite, foxglove?
 13. What is the chemical antidote for each of the following: Arsenic, argent nitrate, phosphorus?
 14. What is the best antidote for poisoning by aconite, opium, belladonna, strychnia?
 15. What is the best treatment in case of poisoning by mineral acids?
 16. What is the ordinary adult dose of the following: Tr. aconiti, tr. opii, tr. nucis vomice, fluid ext. belladonna?
 17. How many drops in 60 minims of tr. aconiti, hydrocyanic acid, distilled water, tr. opii, tr. belladonna?
 18. How would you prepare ferric hydrate quickly for antidote?
- P.S.—Two weeks after I was pleased to have word that I had successfully passed the examination, and that I would have my diploma sent me in a few days. This having now arrived, I am able to subscribe myself a licensed pharmacist

AT THE COUNTER.

In the town of Sunderland.—Young Lady: "Do you keep kid-reviver?" Young Assistant: "Yes, miss." Young Lady: "I will take a small bottle, please." Young assistant produces a bottle of infant's carminative." The young lady never forgot that young man, and that young man never forgot that kid-reviver.

"Did yur tell us 5 cts." is what an order prescribed out West.

CORRESPONDENTS all over the country keep us well supplied with specimens of queer spelling and funny writing. To print anything like all of these would only make wearisome repetition. We pick out a few more or less original:—

"Niger," of the Black Country, contributes a large batch, including "salavatta," "real sut" (creosote), "precipice powder," "clodded lime," "1 dosin corks bigons" (which is indefinite as to size, after all), "penny worth of allmans and swipes of volites mixted." One order is coolly written on the back of a document headed "Elementary Education Act," asking the parents of Florence to state why she was absent from school on such and such occasions. That Florence ought to go a little longer is evident from the order, which specifies "fullarith stone," "HipwCurty wine," and "gingerate" as the wants of the household, the last article being meant for Indian cerate, not gingerade, as might be assumed. We learn, too, that from this collection nail broom is the term used in the locality for a nail brush.

The best specimens in a Newcastle-on-Tyne collection call for "puffe heads" "chimickle food," "slipprellem," "southing sirop," "busylicking," and "tinker waga."

A Durdee correspondent, who calls himself "Micro-organism," is called upon to diagnose in the following case: "Please give the girl a bottle. Complaint—purging and inclined to vomit, and has the cold and the stuff running through me like grass no appetite." Another suffering the other way says "1 $\frac{1}{2}$ worth of pills to work a man." One customer sends for "Balsam E. Pery" and other articles, marking his prescription "private." The next is disposed to treat himself with "Qubib podwer." In various styles of handwriting follow demands for "Hen-pen seeds," "serap of squeals," "tarcassed," and "carimine paint fore the face."

Southampton can compete effectively for the ignorance prize, judging from a collection sent us from thence. The specimens do not, however, comprise anything very comic, "irondyne," "silver latteny," "gum aoreback," and "squasher chips" being the most interesting.

Another correspondent has made a collection of curiosities from which he compiles the following. He has noticed the names of proprietary preparations twisted as follows:—

Countt's acetic acid into	Coucicetassed.
Holloway's pills	Hollies Pills.
Keating's powder	Caten's Powder.
Elliman's embrocation	Ellemes Imbrogation.
Plummer's pills	Plumbers Pills.
Seabury & Johnston's plasters into	Cebia & Johnston's.

His specimens of popular names of drugs include "Crow's supplement," "gros off sullentent," "Paddy Feelan's peals," "Queepavy paste," "Lickers powder," "Cut bare," "Opomian pills," "Salt pennels," "Ground imonia," "Breeks and hurry to clean a baby's toun" (tongue?), "Camels food 6 $\frac{1}{2}$," "Cupids paste," "Sweet nature," "Stuff to remove superflies hare," "Sume kind of stuff for heling and dring a beling," "A blue pill for the boil," "A vile of lime water," "Bacon soda." The following epistle recently came to hand:—

"Sir,—I drop you this noat hoping that you will send me a bottle or box of stiff for making the whiskers to grow, for some parties has disputed with me on the matter and they will not believe that they are sich stiff invented and I hop that you will send it by return for to prove to them they are sich stiff so I am your obedient servant

DONALD—.

Let us hope that he proved his point without spoiling his chin.

Trade Report.

Notice to Retail Buyers:—It should be remembered that the quotations in this section are invariably the lowest net cash prices actually paid for large quantities in bulk. In many cases allowances have to be added before ordinary prices can be ascertained. Frequently goods must be picked and sorted to suit the demands of the retail trade, causing much labour and the accumulation of rejections, not all of which are suitable, even for manufacturing purposes.

It should also be recollected that for many articles the range of quality is very wide.

42 CANNON STREET, E.O., October 16.

TO-DAY'S drug sales were exceedingly lengthy, and there was a good deal of doubt as to whether it would be possible to finish the auctions before four o'clock. When the tenth catalogue was reached the broker at that time in the pulpit asked whether the buyers would go on and finish the sixteen catalogues, or whether the sales should be broken up at four o'clock, and resumed to-morrow. This was put to the vote, and by 21 against 19 it was decided to continue the sales until the end. Mr. Richard Barron thereupon pointed out that a rule passed a few years ago definitely affirmed that after four o'clock no new catalogue should be taken, and demanded that the question as to whether that rule should now be rescinded or not be put to the room. This motion was supported by Mr. Preston and one or two other home druggists, and, on being put to the room, only one vote was given for rescinding the rule. The broker presiding thereupon got out of the *impasse* by declaring that the feeling of the room was that the old rule should not be rescinded, and, this decision practically stultifying the vote first taken, the catalogues were proceeded with till the hour named, when the auctions adjourned till Friday morning, three catalogues standing over.

It will be remembered that some time ago an Amsterdam cinchona broker alleged in our columns that the cause of the depression in the price of quinine was the action of some of the manufacturers who had made contracts with the Java planters direct to buy their bark upon the basis of the cinchona unit upon its arrival. This same broker now returns to the charge in the *Indian Mercury*, with special reference to the last bark sales in Amsterdam. The sales of October 2, he says, were exceedingly disappointing. Some of the large buyers only bought very moderately, and the Brunswick works took practically nothing at all. He alleges that the decline thus caused was due directly to the action of some of these buyers. Shortly before the auctions, he writes, the quinine market was firm although quiet, but on October 1 the Brunswick works suddenly offered quinine at a considerable decline. The steamers which recently arrived in Holland from Java, and others now on the way, have brought considerable quantities of bark, all consigned directly to the works by the planters. The planters will be paid for that bark upon the basis of the cinchona unit prevailing when it arrives at the works; consequently the buyers have a direct interest in depressing the quinine market, apart from the fact that they may simultaneously use the occasion to buy cheaply in the market in order to fill previous contracts made by them. Until this state of affairs is altered, the broker declares, it will be impossible to look for any improvement in quinine or in cinchona.

ALOES—Of *Curaçao* aloes the usual heavy assortment had been declared for sale, but most of this was withdrawn previous to the auctions on account of the fog which prevailed. Only 51 cases, therefore, were actually offered, and of these 44 sold, ordinary dark and overheated, partly fair brown liver at 13s. per cwt., a price which indicates no improvement in the market. Of *Cape* aloes no less than 121 cases were offered at to-day's auctions. These included several lots of exceptionally fine bright hard quality. The price gave way slightly under the influence of this heavy supply, and prices are about 6d. easier all round: fine bright hard selling at 24s. per cwt.; good fair, slightly drossy seconds, at 22s. to 23s.; ordinary softish and dull, from 24s. down to 16s. 6d. per cwt. Of *East Indian*

aloes nothing very fine was offered: very common to dull blackish Bombay were bought in at 30s. to 40s. per cwt. nominally.

AMBERGRIS.—Fine quality remains very scarce and dear. A box of 25 oz. dark, small and bold mixed pieces, fair flavour but "undeveloped," sold at 55s. per oz. Two packages of ambergris from the Southern fisheries were also offered, and sold with good competition—10½ oz. rather bold, dark flat pieces, sandy but of good flavour, at 70s., and another small lot, partly dark, partly good pale, at 65s.

ANISE.—*Russian* anise remains cheap. At to-day's auctions a parcel of 50 bags usual fair quality was shown, for which the owner would take 17s. 6d. per cwt. A parcel of 66 bags fair but rather stony *Italian* anise sold without reserve to day at 25s. to 25s. 6d. per cwt.

ANISE (STAR).—On the spot there is absolutely nothing offering, but for arrival holders would take perhaps 91s. per cwt. The season of the principal consumption is now approaching, hence the discrepancy between prices on the spot and for arrival.

ARECA NUTS remain very scarce and dear. Ten bags of good sound seeds were shown to-day, and bought in at 45s. per cwt. The owner, we believe, would take 39s. per cwt.

BALSAM PERU.—Firmly held. A parcel shown to-day was all bought in, good worked at 6s., and unworked at 5s. 9d. per lb.

BALSAM TOLU.—Firmly held at 1s. 6d. per lb. for good quality. At to-day's auction, 6 cases were shown, and are held for that figure.

BUCHU.—Four bales fair flavoured greenish round leaves were bought in to day without any mention of price. Two bales greyish-green long leaves, of good flavour, and apparently genuine, sold at 3½d. per lb.

CALUMBA has become very slow of sale, and prices are tending rather easier. About 130 bags were offered to-day, and a few lots sold at 29s. per cwt. for good medium to bold bright-yellow mixed. This price is several shillings below that privately reported paid for a similar parcel a few days ago.

CAMPHOR (CRUDE).—The *Denbighshire*, which arrived last week, only brought about 220 packages, the greater part of which is said to have been already disposed of to the refiners. The market is steady, but without much business, the nearest spot quotation being 157s. 6d. to 160s. per cwt.

CAMPHOR (REFINED).—A very firm market. German *bells* at 1s. 9½d. per lb. net for large quantities, with business at 1s. 10d. per lb. for smaller lots. It is said that to-day's price in Hamburg is equal to 1s. 11d. per lb. here.

CANNABIS INDICA.—This drug remains very firmly held. At to-day's auctions, 51 robbins were offered; for fair green but very stalky tops, 6d. per lb. is asked; while a few lots very brown and dusty herb sold at 5d. per lb.; and dull cakey at 4½d. per lb.

CANTHARIDES.—Two barrels old *Russian* are held for 3s. 6d. per lb., an offer of 3s. 5d. being refused to-day. From the Continent the quotations for the new crop are rather dearer, 3s. 4½d. c.i.f., being now asked. *Chinese* cantharides dull and neglected.

CARAWAY SEED.—At Wednesday's spice sales about 200 bags sold at 17s. 6d. to 19s. per cwt. for fair small to good *Dutch* seed.

CARDAMOMS.—Only 132 packages were catalogued for to-day's auctions, and of these about 75 sold at irregular prices, but on the whole with good competition and at an occasional advance for good qualities. *Mangalore*: In large supply; for fair round but rather yellow M.M.M. mark 2s. 5d. was refused; a rather better lot is held for 2s. 9d.; and ordinary brown for 1s. 10d. per lb. Of *Ceylon Malabar*, good bold pale soft sold at 2s. 7d.; medium ditto, 1s. 9d.; and very small, 1s. 2d. per lb.; medium to bold brown, 1s. 7s.; fair to small ditto, 1s. 5d.; dark and split, 1s. 1d. to 1s. 3d. Of *Mysore*, several fair parcels were offered, the highest price paid being 2s. 4d. to 2s. 6d. for good smooth medium size; pale round smaller ditto brought 2s. 2d.; long mixed, 1s. 9d.; and very small, 1s. 2d. to 1s. 3d.; medium to bold fair full, but rather yellow, 1s. 10d. to 1s. 11d.; small pale long, 1s. 4d.; brown and

partly specky from 1s. 7d. down to 1s.; and a lot of unclipped split greenish, 9½d. per lb.; some seeds sold at 1s. 7d. for fair quality, and for other lots 1s. 8d. is the lowest quotation; very common pale seed, 1s. per lb.

CASCARILLA.—Eighty-nine packages are included in the auctions, but of these only 35 were reached to-day, and all bought in; rather dusty and broken, slightly silvery, at 28s.

CASCARA SAGRADA.—Some good thin bark can be bought at 37s., London terms, but perhaps that price could be shaded for one or two parcels; other holders will sell nothing below 38s. 6d., c.i.f. terms, for fine quality shipment from New York.

CINCHONA.—To-day's supply of South American bark included some very good flat *Calisaya* of bright orange colour. Part of this sold at 1s. 8d. to 1s. 10d. per lb. for good sound quality; and from 1s. 3d. down to 6½d. per lb. for damaged lots. Another parcel rather heavier and bolder bark offers at 1s. 9d., which seems cheap, as not very long ago about 2s. 6d. was wanted for such bark. Of *Guayaquil* bark, fair brown to good silvery mixed quill sold at 1s. 1d. to 1s. 4d.; thick broken brown and damaged quill at 7½d. down to 2½d. per lb. For a parcel of fine silvery and mossy *MOZ* in diamond, 1s. 9d. per lb. is asked. Ten bales bold flat heavy *Carthagenia* are held for 5d. per lb.; and 35 bales good bright *Maracaibo* were bought in at 7½d. per lb. *Lora* bark was rather cheaper; rather dark and grey, 1s. 5d. to 1s. 6d.; thick and damaged, 1s. 2d. down to 6d. per lb. About 12 packages of South American *Red* bark were shown, but only partly sold at 3s. 7d. to 2s. 10d. for bold to medium quill, thick but rather dull in colour. For one 70-lb. bale of good stout red pieces 9s. per lb. is demanded.

CIVET.—Rather dull of sale at present. At to-day's auctions three parcels, each of five horns, were shown. Some was bought in at 8s. per oz., the other at 7s. 6d. per oz. For good quality 8s. is asked.

COCA LEAVES.—The recently reported arrival of 110 packages "cocoa leaves" appears to have been entered in mistake at the Customs, and does not seem to exist. At to-day's auctions, 20 cases *Java* coca leaves, which have been offered several times previously, were bought in at 6d. per lb. nominally. An offer of 1½d. per lb. was made for the whole parcel, which consisted of ordinary dark crushed leaves, but it could not be accepted. For 3 bales South American leaves, fair but rather broken palish green, good flavour, the price is 1s. 1d. to 1s. 2d. per lb.

COLOCYNTH.—Quiet, and apparently somewhat cheaper. At to-day's sales a parcel of 29 cases *Turkey* colocynth of very good quality, fine pale apple, was held for 1s. 3d.; two bales good bold selling at 1s. 2d. per lb.; ordinary broken seedy brought 10d. Another parcel was nearly all bought in.

COWHAGE.—Still abundant and cheap. One case, rather loaded with seed and sand, might be had at 2d. per oz.

CROTON SEEDS.—Of a parcel of 30 bags from Colombo, advertised for sale, no samples were shown.

CUBEBS.—The market is rather weak, and some concession would probably be made by holders upon the recent quotations. At to-day's auctions 39 bags from Amsterdam, very small and shrivelled stalky berries, were withdrawn, no price being mentioned. For another parcel of 27 bags, small and shrivelled, rather stalky, 18l. would be accepted.

CUMIN SEED.—Selling slowly at hardly the previous values. Fair seed, *via* Malta, was bought in to-day at 22s. per cwt.; 11 bags good *Tunisian* sold at 20s., and for some good clean *Mogadore* 18s. per cwt. is the price.

CUSCUS ROOT.—Reported rather scarce: two bales fair colour but somewhat damaged from Madras sold at 29s.

DRAGON'S BLOOD remains dear. Two cases broken finger in reed, of good colour, sold at 6l. per cwt., without reserve. Six cases good soft seedy lump, bright colour, brought 7l. 10s. to 7l. 12s. 6d.; and 10 cases very common bold pale cake, 30s. per cwt.

ERGOT OF RYE.—Decidedly easier. Several lots of old, rather wormy *Spanish* ergot sold at 1s. per lb. The lowest price now quoted for *Russian* ergot is 1s. 1d. per lb., c.i.f., and it is said that the holders on the Continent have refused offers slightly below that limit. It is said that the new crop in

Spain is a poor one, but that story is told every year, and cannot be relied upon. For the new *Spanish* ergot 1s. 2d. to 1s. 3d. per lb. c.i.f. is asked. *Ergotine* declining in price.

FENUGREEK SEED.—Good *Mogadore* offering at 6s. per cwt.

GALLS (CHINA).—Galls of the new crop are already offered, it is stated, at 60s. 6d., c.i.f. terms, October-November shipment. At the auctions on Tuesday 217 cases common *Canton* galls sold "without reserve" at 54s. 6d. to 55s. per cwt. We believe that this parcel had been the subject of an arbitration recently. A sale of 50 cases plum-shaped China galls is reported at 62s. per cwt. on the spot. For arrival offers are in the market at 59s. per cwt., c.i.f. terms, for the same shape, last season's crop.

GALLS (TURKEY).—Turkey galls steady, but without alteration at 55s. to 58s. for *Blues*, according to quality. A good many lots of damaged galls sold to-day.

GAMBOGE.—Rather scarce and dearer: 4 cases slightly damp run pipe, partly good fracture, partly dull, sold for 11l. 15s.; and another parcel of 5 cases was bought in, dull small to pale broken loose pipe being held for 11l., and an offer of 10l. 5s. being refused for ordinary ricey lump.

GUM ARABIC.—The demand for East Indian gums has continued brisk since the last auctions, and a considerable quantity of Ghatti gum has changed hands at fully the rates paid at the sales. Of 21 bags *Australian* only a few rather dark glassy, slightly blocky, sold at 30s. 6d. per cwt.; fair frosted bold drop was bought in at 45s.; and it is said that privately sales have been made at that price a few days ago; small picked Turkey grain, 11l. 10s. to 12l. For 10 casks *Mogadore* picked white, partly dusty to good clean, 12l. is asked; and 7l. for rather yellow ditto.

GUM BENZOIN.—*Siam* gum is exceedingly firmly held, and although very little was sold to-day, it is clear that high prices could be realised. Of 47 cases, 16 were disposed of—loose grain, partly cakey, very woody, mixed, at 7l. 2s. 6d., advancing to 7l. 12s. 6d.; small, dark, and blocky siftings, 6l. 5s. to 6l. 7s. 6d.; ordinary blocky and dirty siftings without reserve at 5l.; and common pickings, also without reserve, at 40s.; a parcel of very fine dark red, medium to small blocky almonds is held for 18l.; darker and browner almonds bought in at 15l.; good bright blocky grain bought in at 11l.; and for very small bright grain also blocky an offer of 8l. would be submitted. *Sumatra* gum again dearer, good bright seconds, bold white almondy slightly false packed, were firmly held at 10l., and an offer of 9l. 17s. 6d. was declined; this variety is said to be exceedingly scarce. Good seconds, white almondy centres, but brown borders, sold at 8l. 17s. to 9l., and for rather bolder but old fracture 8l. 15s. was refused, ordinary seconds, few almonds, and rather false packed, brought 6l. 17s. 6d. to 7l. Altogether of 46 cases offered, 24 were sold. Ten cases *Penang* gum were bought in at 5l. 10s. for fair mixed with clear almonds. Of *Palembang* 32 cases were all bought in, good pale bold almondy in tins being held for 62s. 6d. per cwt.

GUM ELEMI.—Fine white Manila is reported to have been sold privately at 57s. 6d. to 60s. per cwt. recently. At to-day's auctions one case of good soft white, slightly dirty elemi was disposed of at 54s. per cwt.

GUM GALBANUM.—Genuine galbanum is not to be had, and would command extreme prices. But various gums are constantly being offered as "galbanum" at the auctions, which are quite unlike the true drug. To-day again 18 casks from Aden, consisting of blocky *Bdellium*, were offered as "galbanum" and withdrawn. True galbanum would probably realise 3s. 6d. per lb. or more if offered.

GUM MASTIC.—Held for high prices. Five cases fair drop were bought in to-day at 2s. 5d. to 2s. 8d. per lb., according to quality.

GUM MYRRH.—The supply is still considerable and largely in excess of the demand. Of 77 packages, the whole was bought in; good pale picked gum from Calcutta held at 5l. 10s. per cwt.; rather dark sorts, mixed with a good deal of *bdellium* were offering at 70s., and a parcel of dark native picked, mixed with false gum, sold without reserve at 5l. 7s. 6d., while dark pickings brought 27s.

HONEY.—The market remains exceedingly firm, and privately high prices are paid for all varieties. At the auctions to-day no *Jamaica* honey was offered: 10 cases *New Zealand*, in 6-lb. tins, orange-candied and eucalyptus-flavoured, sold at 30s. per cwt. The Liverpool market remains firm, with fair sales of *Chilian* honey at full prices.

IODINE.—Unaltered at 9d. per oz. for crude. The convention among the iodide manufacturers has been prolonged until the end of next year.

IPECACUANHA.—Forty-seven packages were included in to-day's auctions, but of these only 15 were offered to-day, and until the whole are disposed of to-morrow it is difficult to say exactly how the article stands. The 15 bales sold to-day brought about 1d. below the last auction rates; fine stout root, 8s. 6d.; good partly thin sound, 8s. 1d. to 8s. 2d.; rather woody low, 8s.; damages, 8s. to 8s. 1d. The price for picked ipecacuanha has been reduced from 9s. 6d. to 9s.

JALAP.—Still firmly held at 2s. to 2s. 1d. for good heavy *Vera Cruz*, much mixed with small; 8 bales were bought in at those rates to-day.

KOLA NUTS have much advanced this week, and in Liverpool, we believe, up to 2s. 9d. per lb. is now asked for good dry seeds, although we understand that an arrival of about 50 packages has taken place. At to-day's auction one barrel very good bright West Indian kolas was put up and sold with strong competition at the extraordinary price of 2s. 5d. per lb.

LIQUORICE.—There is a steady business in the good brands of Italian liquorice, fair quality being worth about 80s., although certain fancy brands bring very much higher rates. At to-day's auctions there was a good competition for several packages of root offered; 35 bales *Russian* decorated root sold at 25s. per cwt.; 76 bales *Spanish* at 11s. 6d. to 13s.; and for 20 bales powder 17s. per cwt. is asked.

MUSK.—The demand is very moderate, and holders have to make some concession to effect sales. At to-day's auctions the prices were, on the whole, a shade easier. Of *Tonquin* pods, first pile, 19 caddies offered, of which only 3 sold: small to bold old-fashioned pods, rather damp top and under skin, 63s. 6d. to 64s.; fine, well-trimmed, small to bold, thin blue skin, dry, were bought in at 80s. to 85s.; and for some old-fashioned, small to bold pods, very damp, 72s. is asked. Of third pile, 10 caddies were all sold: fine blue skin, small to bold pods, slightly damp, 56s.; ordinary badly trimmed and skinny, damp pods, at 28s. to 28s. 6d.; two "tins very small red-haired manufactured pods, said to be made in Germany," elicited no bids; 4 bottles so-called grain musk sold without reserve for export to France at 1s. 6d. per oz.; trimmings brought 1s. 3d. to 1s. 4d.

NUX VOMICA.—Competition for good seeds remains very strong, and the first parcel offered to-day, consisting of 105 bales fair grey silky partly dull mixed *Coconada*, sold readily at 10s., rising to 10s. 9d. per cwt.; a few lots dark Bombay which followed brought from 9s. 3d. to 10s. 6d.; and for another parcel of 178 packages from Bombay, rather dark and small, an offer of 9s. was refused.

OIL (CASTOR).—At to-day's auctions some yellowish Madras oil sold at 4d. per lb. *French* oil is somewhat easier in Liverpool owing to heavy arrivals, and prices have declined $\frac{1}{2}$ d. per lb. No business for forward delivery.

OILS (ESSENTIAL).—Business in fair quality menthol crystals has been done this week, it is said, at 8s. 9d. per lb., but the market is now firmer, and some holders ask as much as 9s. 3d. per lb. At auction a parcel of 5 cases good crystals was bought in at 9s. per lb. *Japanese Peppermint oil* firmly held. *American* oil also fairly steady, but H.G.H. might be bought at 11s. 10 $\frac{1}{2}$ d. per lb. spot. *Citronella* oil quiet, but steady. We call the nearest spot quotation $\frac{1}{2}$ d. per oz., while for arrival, fair native oil offers at 11 $\frac{1}{2}$ d. per lb. c.i.f. terms. A sale of 100 cases *Lemongrass* oil is reported at 1 $\frac{1}{2}$ d. c.i.f. per oz. for arrival, the nearest spot price being 1 $\frac{1}{2}$ d. per oz., at which the article is very firm. *French* and *Italian* essential oils firm but unaltered. *Star-anise* oil firmer, and 6s. 6d. per lb. asked. *Cassia* sales reported at 3s. 9d. per lb. for good quality. Essential oil of *Hops* has

almost doubled in price lately, that drawn from hops, German distilled, being now quoted at 9s. to 10s., against 4s. 6d. last month.

ORANGE PEEL.—Fairly steady. Sixteen packages fair brownish *Malta* gelatine were offered to-day, and 6d. was refused.

ORRIS ROOT.—For the finest Florentine root of the new crop as much as 90s. to 96s. is now required by the importers, and still higher prices are prognosticated. *Verona* root is quoted at 50s. to 55s. per cwt., London terms, for the best. At to-day's auctions several parcels sold with strong competition, 4 bags rather small and dark mixed *Italian*, at 59s.; dull and wormy ditto, without reserve, at 29s.; and 36 serons brown and lean *Mogadore* at 29s. to 30s. 6d. per cwt.

POPPYHEADS.—A small parcel of 10 bags somewhat sea-damaged *German* poppyheads, rather dark and small mixed, was offered to-day, but there was no bid even at 5s. per 1,000, and the lot was bought in at 10s. per 1,000. Good *Belgian* poppyheads are quoted at 12s.

QUICKSILVER.—Lower and very dull. The importers' price is now 10l. 10s., but second-hand holders are offering at 10l. There has been an arrival of 1,000 bottles from Italy.

QUILLAIA.—Still advancing, sales being now reported at 20l. per ton.

QUININE.—The shilling limit has again been touched this week, 20,000 oz. second-hand German bulk having changed hands at that limit, but since then 12 $\frac{1}{2}$ d. and 12 $\frac{3}{4}$ d. has been paid on the spot, and the market closes steadier, with buyers at the latter figure. A sale of 10,000 oz. January-March at 12 $\frac{3}{4}$ d. to 13d. (second hands) is also reported.

RHUBARB again in heavy supply, 161 cases being the total of to-day's show. It was very difficult to effect sales, and we call prices barely steady. About 25 cases sold at the following prices:—*Shensi*: medium to bold, fair coat, three-fourths pinky, the rest dark and somewhat spongy, 2s. 2d.; small to medium, fair coat, sound round root, 1s. 11d. refused, 2s. being the price; medium to bold, flat fair fracture, one-fourth dark, sold at 1s. 7d.; and small to medium, flat rough coat, fairly good fracture, at 1s. 3d. to 1s. 5d.; very low and wormy root brought 3d. to 3 $\frac{1}{2}$ d. per lb. *Canton*: fine druggist's root, bright coat, three-fourths pinky fracture, round, 2s. 4d. per lb.; druggist's root, round and good fracture, but spongy and rough coat, 1s. 5d.; bold good coat, round, good fracture, 1s. 10d.; and a quantity of very common wormy root at 4d. to 5d. per lb. *High-dried* was all bought in, the prices being from 1s. to 1s. 2d. for small and medium to bold flat, fair coat, of good fracture.

SCAMMONY.—About 25 packages sea-damaged root sold to-day at 23s. to 25s. (very low quality at 10s.), while for sound quality 27s. 6d. is wanted. *Smyrna resin* is held at 12s. 6d. to 28s., according to quality.

SENNA.—The very large quantity of 1,244 packages was included in this week's auctions; the greater part of this was reached to-day, and, with the exception of some 50 packages *Alexandrian*, consisted of *Tinnerelly* leaves, mostly of ordinary character, about four-fifths of the whole supply ranging in price from 2d. to 3d. The common qualities were about $\frac{1}{2}$ d. easier, but anything above 3d. brought very high prices, and for the best leaves a slight advance was occasionally paid; medium to bold fair green leaf brought 5d. to 6 $\frac{1}{2}$ d.; greenish, but somewhat yellow mixed, medium size and specky, 4d. to 4 $\frac{1}{2}$ d.; ordinary yellowish and dull small to medium leaf, from 2d. to 3 $\frac{1}{2}$ d.; and common low small and partly rotten, from $\frac{1}{2}$ d. to 1 $\frac{1}{2}$ d. About 340 packages have arrived this week. Of *Alexandrian* senna nothing was sold: good pods are held for the high price of 1s. 3d. per lb.; small broken leaf bought in at 6d.

SHELLAC. During the week the article continued to decline, and at the auctions of 774 cases offered about 500 sold at fully 1s. decline on *second orange*, and 6s. to 7s. on *button lac*. Reddish to fair second orange brought 88s. to 90s.; blocky ditto, 85s. to 86s.; *Garnet*, good free A.C., 95s.; *button*, fair to good first, 92s. to 97s.; thirds to seconds, 83s. to 88s. per cwt. After the auction the market for delivery continued to decline, but to-day, on the strength of

cable advices from Calcutta announcing small shipments for the first half of the month, a sudden change set in, and about 3,500 cases sold (of which 1,300 in the ring) at a recovery of from 1s. to 2s., closing about 1s. over last Thursday's quotations for December, but from 3s. to 4s. lower for January and February. The following were the quotations at to-day's call:—

		Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Orange TN, sellers	92	91	390	200	400	86	
			at	at	at		
			91	87	88		
			to 91 6				
„ buyers	88	89	100 at	400 at	—	84	
			92	88			

Garnet AC nominal.

TEA.—The China market is rather more liberally supplied with tea this week, and a fair trade has been done by private contract at steady prices, in addition to rather large public sales. Saryunes at 6d., 6½d., and Soomoos from 7d. to 8½d. are now tolerably good value, and far cheaper than Monings, and will be found useful teas in the lower canisters. Siftings from 4½d. to 5d., with fair quality, are also worth attention, and as the supply of these is limited, we may see considerable scarcity later in the season.

TONQUIN BEANS.—Several lots of *Pará* beans were offered to-day and sold at 4s. 6d. to 4s. 7d. for small good dark beans. Foxy beans are held at 3s. 9d., and fair ordinary at 4s. 3d. per lb.

WAX (BEES').—In fair supply, and sold, with strong competition, at higher rates for *Jamaica*, of which 30 packages sold readily at 5l. 15s. to 6l. for brown and red mixed; 6l. 2s. 6d. to 6l. 5s. for good red to yellow. *Mogadore* of good quality held for 5l. 5s.; six packages rather dark to fair grey *Australian*, 5l. 10s. to 5l. 15s.; and about 265 packages *Madagascar* held at 5l. 7s. 6d. for good bright, and 97s. 6d. to 5l. 2s. 6d. for dark to fair.

WOOD OIL.—The price of gurjun balsam is at present a very low one. The quotation, according to quantity, is 3¾d. to 4d. per lb. for fair balsam, lodged in 40-lb. iron drums.

CHEMICALS IN THE NORTH OF ENGLAND

THE market for heavy chemicals has been very firm during the past week. *Bleaching-powder*, *Bicarbonate of soda*, *Soda ash*, and *Soda crystals* are all higher. *Caustic soda* has slightly declined in value for 60 and 70 per cent., as might be expected, seeing that current rates are above those which will shortly come into force, as fixed by the Chemical Union.

THE CHEMICAL UNION.—A rumour has been in circulation on the Liverpool Exchange that there is a hitch in the Chemical Union. This has probably arisen from the fact that a meeting of the committee has been held in London to consider the amendment of some of the financial clauses, which it was found necessary to alter for Stock Exchange purposes, and which will have the effect of delaying the issue of the prospectus for two or three weeks. The announcement made in THE CHEMIST AND DRUGGIST a few weeks ago that the Chemical Union would take over the chemical works on November 1 is now confirmed by a notice issued to all the owners of the alkali-works to take stock of all goods and materials, and to commence a set of new books for all business transactions on the morning of November 1.

BICARBONATE OF SODA.—The market is very strong, with further advance in price, and makers well sold for early delivery. 7l. per ton quoted for 1-cwt. kegs, f.o.b. Liverpool, with usual allowances when taken in larger packages.

BLEACHING-POWDER.—There is considerable improvement in this article, and prices for this month's delivery have advanced both in the Liverpool and Newcastle markets. For November-December delivery makers still quote combination prices, although some sales are reported as being made at 5l. 15s. Consumers are still covering their wants for next year at Union prices. Some inquiries are also in the market

for hardwood on American account for next year's deliveries. For prompt shipment price is 5l. 7s. 6d. to 5l. 10s. on rails, Widnes and St. Helens, for softwood casks, and 6l. to 6l. 2s. 6d., f.o.b. Liverpool, in hardwood casks. Tyne market much stronger at 5l. 8s. 9d. to 5l. 10s., softwood, and 5l. 12s. 6d. to 5l. 15s., hardwood.

CAUSTIC SODA.—This article has slightly declined in value for lower strengths, higher strengths being very scarce at the moment. For spot parcels 60-per-cent is 10l. 10s. to 10l. 12s. 6d.; 70-per-cent., 11l. 10s. to 11l. 12s. 6d.; 74-per-cent., 12l. 10s. to 12l. 15s.; all f.o.b. Liverpool. Prices for forward delivery have again been advanced, and 70-per-cent. is now quoted 11l. 10s. for November and 11l. 5s. for December. For 1891, 11l. is minimum price—60-per-cent., 1l. per ton less than above figures; 77-per-cent. white, for delivery from now to end of December, is quoted 12l. 5s. per ton; ground, 77-per-cent., in 3 to 4 cwt. casks, 15l. 5s. per ton, f.o.b. Tyne.

CHLORATE OF POTASH continues steady at 5½d. to 5¾d. per lb. for prompt delivery. Forward quotations unaltered.

CREAM CAUSTIC.—Very firm, and not much offering—9l. 7s. 6d. to 9l. 12s. 6d. per ton, on rails, and 9l. 12s. 6d. to 9l. 17s. 6d. per ton, f.o.b. Liverpool, according to brand.

HYPOSULPHITE OF SODA very steady and in good demand. Price, in 1-cwt. kegs, 6l.; casks, 5l. 10s. For delivery on rail, Liverpool and Manchester, 6l. 5s. and 6l. 15s. per ton for casks and kegs respectively.

SODA ASH.—The Liverpool market is very firm, and prices have advanced. Very little offering over present year, makers being well sold up to end of December. A good many sales reported over 1891. Makers quote 1¾d. to 1½d. per degree, less 3½ per cent. discount for both *Caustic* and *Carbonated*, according to makers' ideas. Tyne market steady at 1¾d., less 7½ per cent. for prompt. For delivery from Manchester to end of 1891, the minimum price of 1¾d., less 3½ per cent., is still quoted.

SODA CRYSTALS are slightly better. For delivery from now to end of year price asked is 3l. to 3l. 2s. 6d. per ton on rails, and 3l. 5s. to 3l. 7s. 6d. per ton f.o.b. Liverpool. For prompt Tyne price is 2l. 15s. 6d. to 2l. 16s. per ton; for November-December, 2l. 16s. 6d. per ton; for delivery ex ship Thames, 3l. 2s. 6d. per ton. Sulphate of soda quiet, but prices firm. For delivery to end of year makers quote 40s. per ton in bulk on rails Widnes and St. Helens. For next year, price is 42s. 6d. per ton. There is no change in Tyne prices, which are 35s. per ton in bulk and 45s. per ton in casks for October delivery. For November forward to end of 1891 price is 42s. 6d. and 52s. 6d. per ton respectively.

SULPHATE OF COPPER market steady for prompt, at 19l. to 19l. 10s. per ton, less 5 per cent. discount f.o.b. Liverpool. For early months of 1891 price quoted is 20l. 10s. to 21l. per ton.

THE GERMAN MARKETS.

HAMBURG, October 14.

THE general tightness of the money market does not remain without influence on the produce business in this port, and to-day nearly all articles in our branch are in favour of buyers, while there was a total absence of speculative animation. A few drugs, however, and especially Peruvian balsam, camphor, condurango, quillaia, bees'-wax, and carnauba wax, remain firm in price. More interest has been shown for Japanese isinglass, copaiba balsam, honey, spermaceti, star-anise, and peppermint oil, while a decline is to be noticed in cantharides, ergot of rye, and Japau wax.

AGAR AGAR.—The owner of the stock of this drug here asks very high prices, and will not sell first quality under 3.90m. to 4m.

BALSAMS.—No arrivals at all have yet been received of *copaiba*, and under the circumstances genuine balsam is now held for 5m. Maracaibo balsam is not offering at all. The demand for *Peruvian* balsam is very slight, but the price of 10½m. for fine quality must be paid in order to induce busi-

ness. *Tolu* balsam neglected at 3.20m. *Canada* balsam: small arrivals.

HONEY.—*Chilian* advancing in price, with very small imports.

JALAP.—All speculators remain firm at their prices.

OILS (ESSENTIAL).—American *Peppermint* oil dearer; H.G.H. brand is sold at 12½m. Japan also is meeting with renewed interest; good oil at 10½m. Of *Menthol* oil only a few small lots are offering, for which 80m. are asked.

SPERMACE.—In increasing demand, and held firmly at 3.10m.

WAX (JAPAN).—Offering at 92m. to 93m. for fine white squares.

NOTES ON ESSENTIAL OILS.

(From Messrs. Schimmel & Co.'s Report)

EUCALYPTUS OIL.—The production of eucalyptus oil in Algeria, which only amounts to about 2,000 kilos. a year, is said to be capable of considerable extension, and even at the low prices it must be a very lucrative industry, if one may judge from the experiments which have been made in Leipzig with French material, the price of which was greatly enhanced by the enormous rate of railway carriage. It is also said that in Algeria the cultivation of *Eucalyptus rostrata* is steadily gaining ground, although this species is of slight value only for the manufacture of oil. Oil of this variety has not hitherto been known in commerce. With reference to an observation by Mr. P. W. Squire, in THE CHEMIST AND DRUGGIST, that an oil has frequently been met with in commerce lately which was offered as *Eucalyptus Amygdalina*, but which contained no phellandrene, and was dextrogyre instead of levogyre to polarised light, we have ourselves noticed that the oil bought direct from Australia recently contained only a small percentage of phellandren and was weakly dextrogyre. We are of opinion that the leaves of different varieties of eucalyptus are no longer kept carefully separated in Australia during the distilling operation, and that consequently the names under which the oils are brought into commerce do not always correspond with their origin. On the occasion of the recent Berlin Congress three new varieties of eucalyptus oils distilled by us were exhibited. These oils are not yet found in commerce, but one or the other of them is about to make its appearance. These oils are the distillates of *E. dealbata*, *E. maculata*, and *E. maculata* var. *citriodora*, all of them of a fine melissa-like flavour. In the meantime large samples of distilled oil of *E. maculata* var. *citriodora* have been received from Queensland. This oil has been distilled by Mr. Jeffreys Timbury. Not only does its flavour agree with that of our distillate, but its other properties also are so much akin to it that there is no doubt of the identity of its origin. Its s.g. at 15° is 0.873; about three-fourths of it has a boiling-point of 205° to 210°, small quantities vapourising somewhat below or above this temperature. The fraction having a boiling-point of 205° to 210° consists of almost chemically pure citronellon. Upon agitating the oil with a solution of bisulphite of soda the mixture becomes strongly heated and forms a fairly hard mass, from which, after washing with ether and decomposing with a solution of soda, pure citronellon separates. The parts of a lower boiling-point than 200° (about 4 per cent. of the whole) showed none of the characteristic reactions of cineol (eucalyptol), and it may therefore be taken for granted that this body is wanting in the oil of *E. maculata* var. *citriodora*. The thoroughly rectified oil is colourless, has a pleasant flavour of melissa, and, presuming the price not to be too high, will be useful in perfumery and soap-making. Unfortunately, we are quite in the dark as to the price, and therefore will scarcely be possible to make any sales until April next year. There is no doubt that the oil has a very much finer flavour than citronella oil, and if its price should lie between 2s. 6d. and 3s. 6d. per lb. it may find a considerable employment; if it is dearer, however, it will only be used on a smaller scale. [In

January of this year we had a communication from our Melbourne office regarding this oil, in which it is stated that "the leaves are carefully separated from the young shoots, and the oil distilled from them alone. In its own district it is being used as a substitute for globulus oil for medicinal purposes. Oil distilled from the older leaves not separated from the stalks Mr. Timbury calls 'commercial oil' of *E. citriodora*, and sells it at 3l. per gallon. The purer oil is put up for retail sale in bottles, sold wholesale as follows:—½ oz., 9s.; 1 oz., 15s.; 2 oz., 28s.; 4 oz., 48s. per dozen; pint bottles, 20s. each. Mr. Timbury states that the oil is a powerful disinfectant and deodorant, even the aqueous solution deodorising the most offensive matter. The yield from a ton of moderately dry leaves is about 520 oz. of oil, from fresh leaves about 270 oz. There is only one other lemon-scented eucalyptus." It would appear from this that there is little hope of the oil coming down to 2s. 6d. or 3s. 6d. per lb. We may also recall the fact here, which we stated as long ago as May, 1886, that the leaves of old and young trees alike of *E. amygdalina* and several varieties thereof, as well as the leaves of other species, are gathered by the bushmen collectors, who have no botanical knowledge; hence there arises considerable variation in the physical properties of the different brands of Australian *E. amygdalina* oil.—ED. C. & D.]

GALBANUM.—As a curiosity, it may be mentioned that a recently distilled large quantity of blocked galbanum yielded the phenomenal proportion of 22 per cent. of oil, whereas in former distillations the percentage always varied from 7 to 8 per cent.

GERANIUM OIL.—The first and the second cuttings of the geranium plants in Algeria have given a slight average yield, and prices therefore ought to be considerably higher than last season. Any decline which has occurred, notwithstanding this, must be attributed solely to the competition of the French sister-colony of Réunion, the very important production of which is now no longer monopolised, but appears in the open market. Whether the present values of both varieties have already fallen to the limit of possibility is an open question, but it is a fact that under the altered conditions of production an entirely new era of employment is dawning for this oil, and that the manufacture of certain classes of soaps (rose soaps) scented with it is materially benefited thereby. Distillation takes place on Réunion, and in a smaller degree on Mauritius also, direct on the plantations, the names of many well-known vanilla-planters occurring among the producers. Sales are made through commission agents, whose principal qualification lies in their capacity to select the best brands. At present this industry is still a new one, but when once the different brands are known, and quoted according to value, regular supplies may be expected. In quality, the Réunion oil closely approaches the finest African brands; in appearance it is distinguished by a beautiful green colour, which, according to the tests that have been made, is not caused by copper. No material chemical differences between the two varieties exist. We find African geranium oil of direct import to be of 0.899 s.g.; Réunion ditto, 0.891 s.g.

PEPPERMINT OIL (JAPANESE).—The yield of the season's crop in Japan is estimated slightly higher than that of the previous season, namely, at 40,000 cattie. The stock remaining of last season's oil in the middle of July consisted of about 16,000 cattie dementholised oil, 16,000 ditto oil and crystals, and 1,000 crystals, or about 33,000 cattie in all, of which about 8,000 are likely to be sold before the new crop comes in. This would leave 25,000 to be carried over to new season, and furnishes a total quantity of 58,000 to be reckoned with. Important supplies have also accumulated in Europe. In the face of the exceedingly slight demand these figures reveal an exceedingly critical position, all the more so because the exports from Japan for the first half of the year (amounting to 17,000 kilos.) are not included in the above figures. The prices of liquid oil in these circumstances will hardly be able to maintain themselves, but may probably have to bear the principal brunt of an unfavourable market position, as crystals represent a higher intrinsic value, and are a favourite article for speculative undertakings, although at present the situation is not a very promising one.



Memoranda for Correspondents.

Always send your proper name and address: we do not publish them unless you wish: if you do not, please use a distinctive nom-de-plume.

Write on one side of the paper only; and devote a separate piece of paper to each query if you ask more than one, or if you are writing about other matters at the same time.

If you send us newspapers, please mark what you wish us to read.

Ask us anything of pharmaceutical interest: we shall do our best to reply.

Before writing for formulae consult the last volume, if you have it.

Letters, queries, &c., will be attended to in the order received.

The Weekly Half-holiday.

SIR,—As regards the want of unanimity among chemists in closing one half-day during the week I would like to say that it is just eighteen years since the half-holiday from 2 P.M. on Thursdays was commenced in this little town. Some seven or eight years after its start a cry was raised by some who were not in favour of it "that it would be better to make an alteration and close at 7 every evening except Saturdays (market day), and keep open on Thursdays as before." This new plan was strongly opposed at a large meeting called to discuss the question, and it was found that the public were strongly with the assistants and apprentices in retaining the half-holiday. Some small inconveniences were felt at first owing to customers' forgetfulness. The boon is much appreciated, both by master and man. As regards other towns doing likewise, is it not a matter of, in nearly every case, "Where there's a will there's a way"? We are three chemists, and on Sundays necessities are supplied at the private door. But I think I may add that callers are not encouraged to come on that day, and are in consequence few and far between.

Newport, Salop,
October 15.

Yours truly,
T. W. PICKEN.

SIR,—In your issue of October 11, "A Southampton Chemist" asks: "Why should not chemists close their shops early one day in the week?" There is no reason why men who have assistance should not do so, as there can always be one man on the premises to attend to real wants; but for a man who is alone to sit in his shop with closed doors would not be good for his health or temper: he wants a free circulation of air to compensate for his enforced confinement. If he wants a holiday, he finds it better in every way to take a whole day out, by getting someone to take charge for him. A friend of mine finds employment by taking charge for five different chemists, one day a week each. One reason against early closing is that many women go out to work by the day, come home to find a child needs medicine, and run to the chemist; or a man may have been in pleasant converse with a few friends after the day's work, and finds when he comes out into the air that there is a difficulty in co-ordinating his locomotive powers—he goes to the chemist instinctively, who gives him a dose, which enables him to walk home triumphantly; but if, "being holiday, the beggar's shop is shut," the victim of conviviality rolls along the street, knocks against a lamp-post, falls down, and perhaps needs a truck and two policemen to take him, if recognisable, to his home to the horror of his family; or, if unknown, to the State refuge for inebriates. Really, at a time when the trade part of the chemists' work is gravitating to the stores and general dealers, many of us feel that we have only the professional scraps to live on, and that if we cannot make ourselves useful to our clients at all seasons these will gravitate to the 6d. surgeries.

October 15.

Very truly yours,
DENS. (156/2.)

Postal-order Protection Book.

POSTAL ORDER RECORD BOOK.

Date when sent	When drawn	Issuing office	Number of order	In whose favour	Amount	Stamps affixed	Payable at	Date of invoice	Remarks
1890 Oct. 6	1890 Oct. 3	Hull	J 50,378 6 H 43,218 5	L. Halse S. Maw, Son & T.	£. d. 10 0 17 6	— 5d.	London Chief office	Sept. 7	Year's subscription C. & D. 6d. deducted for package returned

SIR,—Postal orders are very great everyday conveniences, and to none more than the retail chemist and druggist, who finds in them a ready means of transmitting through the post small amounts, but it is well known that they offer great temptations to dishonest post-office officials to appropriate the same to their own use, and as the Post Office is only required to pay the order once, whether to the rightful owner or no, the loss must be borne by the sender, but in order to enable the Post Office to trace out stolen notes, it is important that the sender should keep a record of the number of the order and the date *when issued*, and also date *when posted*. This is a very simple matter, and is often done on small scraps of paper, put on the file, and destroyed on getting the receipts by return post. But, Sir, it seems to me, if some of our printing firms would publish a cheap book ruled somewhat after the fashion of enclosed slip, it would find a ready sale, not only amongst chemists and druggists, but in "the regions beyond," and, to my thinking, would well repay the first in the field; and if any of the firms advertising with you choose to take it up, I present them with the idea "free, gratis, for nothing," only asking, in return, that the trade shall be informed when they are ready.

Faithfully yours,
SODA CARB. (150/34.)
October 6.

The Chemists' Assistants' Association.

SIR,—We have read with very much pleasure and profit your able and suggestive leader on "Chemists' Associations" published in your last issue.

Although you do not appear to regard any of the existing associations as fulfilling all the useful functions possible, still we claim for the association we represent that it realises the major part of the three objects you have indicated as desirable for a chemists' association to attain to.

1. The primary object of the association, and that for which it was established, is the promotion of friendly intercourse amongst its members and their friends, and while we believe that every meeting contributes to this end, special meetings are held for this purpose alone.

It is a fact that cannot be too frequently insisted upon, that a member of the association is pledged to no special set of opinions. It is impossible to avoid bringing the views of the active officers of the association into prominence, but no association can exist without someone to do the work of organisation, and however much the heads of those maligned persons, the officers may be in "cloudland," the members

are in no way committed by the productions emanating from them.

It is common to find men refusing to attend a meeting because they do not agree with the views held by the organisers thereof, though that fact should rather encourage attendance, with a view to healthy opposition. The association we represent welcomes and respects the views held by each of its members irrespective of those held by the majority.

2. Discussions on trade politics affecting its members are held as occasion arises; and although it may be necessary to arrive at the feeling of the majority of the meeting by a "cut-and-dried" resolution, it is open to anyone to bring forward any resolution without previous notice.

3. The educational work done by the association is well known, and, although not its primary object, is, we believe, both appreciated and useful.

The association, numbering, as it does and should do, nearly double that of any other association in the kingdom, is yet capable of much greater extension, and we believe that its advantages only require to become better known for it to receive better patronage.

We ask you, therefore, to allow us, through the medium of a paper so widely read as THE CHEMIST AND DRUGGIST, to draw attention to the virtues of the Chemists' Assistants' Association, to assure you that it has not by any means "exhausted itself," and to inform your numerous readers that its officers will be glad to supply any further information to intending members on application to

Yours faithfully,
103 Great Russell Street, E. RICHARDS, } Hon.
October 14. C. W. SECCOMBE, } Sees.

DEAR SIR,—I wish to draw your attention to a misleading statement in your column of Commentaries of to-day. As a member of the Chemists' Assistants' Association, I must contradict most emphatically that it "has pretty well exhausted itself." It has never been in so flourishing a condition as it is at present. It is somewhat unfair to judge it by its programme alone, which, by-the-by, is only known up to the end of the present year. I had the honour of being one of the auditors of the past session, and I may tell you that both in number of members, and balance forward, the affairs of the association show a decided increase. Therefore, in justice to an association so useful, I think the statement made should be as prominently corrected.

Apothecaries' Hall, Yours faithfully,
London, E.C., October 10. C. E. PROKING.

["By their fruits ye shall know them." Why should not this very trustworthy maxim be applicable to a chemists' assistants' association as well as to other bodies?]

"Disintegrating Tabloids" and "Tablets."

SIR,—Referring to the communication of Messrs. Allen & Hanbrys' in your issue of the 11th, we beg to say that we are surprised that they should claim the idea of compressing drugs so as to disintegrate readily as original with them. "Tablets" prepared with this object in view, and advertised as such, were introduced by us into this country some twelve years ago. We can refer to our advertisements of five and ten years since and more to show that while "tabloids," or "tablets," of chlorate of potash and chloride of ammonium and other drugs intended for local effect were compressed hard so as to dissolve slowly, bringing a concentrated solution in contact with the mucous membrane continuously, such drugs as quinine, Dover's powder, pepsin, and many others intended for absorption from the alimentary canal were advertised as disintegrating readily. We have made a special point of the ready disintegration of such "tabloids" in our advertisements for years past, and the medical profession have found our articles reliable and satisfactory. We are constantly making improvements wherever possible in all our products.

Yours very respectfully,
October 14. BURROUGHS, WELLCOME & CO.

The Title "Chemist and Druggist."

SIR,—If our title is no longer worth fighting for, why should we retain that worse than useless institution, the Pharmaceutical Society?

Let it be abolished. Let Government appoint an examining body, pure and simple, if still necessary, and do their own prosecuting when necessary.

Should we not be better off? At the same time, what is the matter with company pharmacy? It is open to all, qualified or unqualified, has its own advantages, and, like everything else, is ruled by capital.

Mr. Martindale tells us not to forget our alma mater, which has done so much for us, but he does not say what. Is it good or evil, or is he still dreaming, as he appears to be in his recent attack upon one of the best friends of the modern pharmacist?

Yours faithfully,
NORTH DEVON. (157/14.)

SIR,—Capital your article on our title. I almost question if now the title is worth fighting for. This is owing largely to the apathy of Mr. Carteighe and the Council. It used to be worth something, but now, although we have gone to considerable expense and worry to get the title, we have no privileges over the common huckster—and worse!

Yours truly,
W. T. M. (154/8.)

Straining the Law.

SIR,—A man called on me this morning, and, producing a ginger-beer bottle containing turpentine, with my label on, informed me that the Association of Makers would take proceedings against me for using their bottles. Now, I had not used the bottle. A customer came for a pennyworth of turps, and handed the ginger-beer bottle, into which the turps was poured and duly labelled. Can any proceedings be taken? I think it rather important, as I dare say every half-hour we get one of these bottles handed in for conveying some drug, and imagine my brother-chips are in much the same position. I told the man he could inform his association, that I did not believe they could do anything. Of course, I never use the bottles myself, and I do not think it can be contended that my action in serving customers in the bottles they bring can be liable to prosecution.

Yours,
39 Bridge Street, Cardiff, A. HAGON.
October 15.

[We should think no moderately intelligent magistrate would listen to such a case.]

LEGAL QUERIES.

148/43. *Aja.v.*—The first article you name is well known to be an arsenical compound, and as such should only be sold retail by registered chemists and druggists. But only the Pharmaceutical Society can prosecute unregistered persons for selling it, and we suppose they do not think it would be discreet for them to take action. We do not know the composition of the other preparation.

148/13. *Apprentice*—You cannot claim a salary if it is not stated in your indentures. Out-door apprentices sometimes pay a small premium, but perhaps more often do not.

147/58. *W. A.*—You can sue for the value if you like, but it would be hardly wise to do so. There must be some mistake, as it could be of no interest to printers to keep your labels.

149/74. *Leo.*—An unregistered person is liable to prosecution if he take, use, or exhibit the title "druggist." The title "drug stores" is not so protected.

155/26. *Hotspur.*—We believe it is "customary" to make soap liniment with methylated spirit, and no doubt it is legal to sell the methylated preparation as "opodeldoc." It is possible that a conviction could be obtained under the Sale of Food and Drugs Act if such an article were sold as "soap liniment," but in such a case a good defence might be offered.

149/66. *Cochineal*.—The limited company is not liable to a fine for selling poisons or dispensing prescriptions, even though it should keep no qualified assistant; but the unregistered person who should sell a poison in the company's shop is himself liable.

152/36. *Vera*.—sends for general information the following extract from a letter received from the Board of Inland Revenue:—"Homœopathic medicines are dealt with as regards liability in strict accordance with the rules observed with regard to other medicines. A drug dissolved in spirit cannot come within the exception, as is the case of medicinal drugs vended entire, neither does a pilule, unless entirely composed of one drug."

155/47. *N. Y. Z.*—The law concerning the imitation of another person's wrapper, handbill, or label cannot be laid down as a simple proposition. It is possible to register any literary work, from an encyclopædia down to a handbill, at Stationers' Hall, and thus to secure the copyright. But proceedings in respect to imitations of labels, wrappers, are generally taken in a court of equity under the form of an application for injunction. In the case you bring before us the plaintiff would, no doubt, be able to make out a good *prima-facie* case of colourable imitation; but it is impossible to tell whether he could establish it to the satisfaction of a judge. He might win with one judge and lose with another.

154/20. *T. B. F.*—Alpe says ("Handy Book of Medicine Stamp Duty," page 29):—"The retailer may break open duly-stamped inclosures of dutiable medicines and sell the contents without paying further stamp duty, provided that he does not inclose them in a packet, box, &c." He explains this at some length, and, on page 116, shows that a number of packets put up for separate retail sale cannot be supplied with one stamp.

152/32. *Durham*.—It is impossible to define exactly how much personal attention is to be given to an apprentice. In the case named, the latter seems to have abundant opportunity to learn the business, and that is legally sufficient. Apprenticeship is not dry nursing.

W. T. M.—The weights and measures were seized under the old Act; the new Act applies to weighing instruments.

MISCELLANEOUS INQUIRIES.

Correspondents who ask replies to be inserted "this week" or "next week" are reminded that we do not guarantee replies, and that their insertion depends upon the space at our disposal for such matters. It is generally impossible for us to find room for queries the same week they are received.

A large number of correspondents ask us for formulæ and other information already published in this journal. It is not fair to more careful readers that we should frequently repeat such information, and so long as the back numbers containing the formulæ or replies required are in print we must decline to do so. Back numbers of our weekly issue can be obtained from the publisher at 4d. each.

Correspondents who have made inquiries regarding the following subjects will find the information in the numbers indicated.

152/51. *Tyroc*.—(1) Nubian Blacking.—June 15, 1889, p. 837. (2) Crude glycerine is purified by treating with sulphuric acid and distilling.

152/6. *Ajax*.—Egg Julep.—Nov. 30, 1889, p. 778.

151/48. *Graph*.—See March 1, p. 313.

149/6. *A. V. (Madrid)*.—There is no book of recent date on Ergotin, and most of the papers on the subject are also old. Fluid extract of ergot U.S.P. is objectionable for hypodermic use on account of the alcohol and acid which it contains. These would give rise to irritation. The British Pharmacopœia directs ergotin to be made by evaporating the fluid extract B.P. The product makes a good hypodermic injection when dissolved in a sufficiency of chloroform-water to bring it to the proper strength.

150/3. *F. Kirby*.—Myrtle Wax is the product of *Myrica cerifera*. It comes occasionally into the London market and may be obtained through any wholesale house.

149/66. *Cochineal*.—The formula is the generally accepted one, but it is the better of the addition of 2 oz. of rectified spirit and 5 drops of chloroform. Glycerine is better than sugar. You may utilise the colouring which you have on hand by evaporating to four-fifths bulk and making up when cold with spirit.

148/24. *A. S.*—Red Jamaica Sarsaparilla.—The supply of this article is limited in extent and any lots offering in the open market are generally well competed for. We are sure you would get the cut root from any firm of wholesale druggists advertising with us. Or they would sell you the root as it arrives (if you are able to take an original package of about 80-100 lbs.) upon the most favourable terms. Look carefully through our advertisements, and you will find all you want. If, after trying, you should still have a difficulty, let us know again.

150/6. Second-hand Parcels of Iodine.—A subscriber abroad, who has entered into a contract for the supply of a large quantity of iodine, wishes to know where he can obtain important parcels without, in his own words, "going to Canossa"—i.e., to the headquarters of the iodine ring—and we suppose, though he does not say so, at a second-hand price. We are afraid we cannot help our friend much. He might pick up a few stray kegs here and there, but he talks of five tons as a first instalment, to be followed by much larger orders. It is doubtful whether the quantity which he declares himself ready to buy is available in the second-hand. Certainly those who might be in a position to supply our inquirer's wants are much too cautious to hawk the fact around on the market.

137/21. *W. A. D.*—The Market for Insect-flowers.—If you have seen no quotation for this article in our market reports for several weeks, the reason is that business in it in the wholesale market is at present virtually suspended. Of course a few bales still change hands occasionally, but they do not affect the prices, which virtually remain as when we last quoted them. The principal buying season for this article is from February to May. Insect-flowers, as imported here from Trieste, are quite ready for grinding, and should require no extra drying. In a wholesale way 1d. per lb. is charged for grinding, and the loss during the operation also represents fully 1d. per lb. The flowers are imported here, as a rule, in pressed bales, secured by iron straps, and weighing from 4 to 8 cwt., sometimes, but rarely, in small 1½ to 2 cwt. bales. They are not usually sold by auction, and any wholesale drug house advertising with us will be glad to supply you with an original package. Several importers also advertise with us. You may find some further information on this subject in the forthcoming DIARY.

113/34. *E. P.*—The Oak-bark Trade.—The centre of this trade, we should think, is in Bermondsey. We do not know of any special brokers for oak bark, nor can we tell you the relative values of the different varieties of bark. Many tanning substances, such as myrabolans, valonia, gambier, yellow berries, and others are Mincing Lane articles, but we have never heard of oak bark being offered there. The *Leather Trades Circular* is published at 57 Weston Street, Bermondsey, S.E.

68/48. *Herb.*—**Quassia Filings.**—The waste quassia or the quassia or bitter-cup makers is termed filings, not chips. The chips are simply the wood chopped small. The quassia logs are generally chopped in this country, but quite recently some have been imported from the West Indies. Another kind of quassia is the thin raspings which are manufactured chiefly on the Continent. Bitter cups have gone out of use greatly of late, and we think you had best apply to a wholesale druggist, or perhaps a druggist's sundriesman, for a 23-lb. parcel. See our advertisements.

144/4. *N.*—**Prepared Ginger.**—We are not aware of any "prepared ginger, of which the fibre has been taken out," having been imported here. We have heard of dried ginger being offered for sale occasionally, which had been partially extracted by essence makers, and "doctored" afterwards to prevent detection by appearance. If you mean green ginger, we would advise you to write to Mr. R. C. Treatt, of Dunster House, E.C. Dry Jamaica ginger as imported may be bought through any of the firms who advertise with us that they make a speciality of the sale of drugs in original packages.

139/8. *F. M. P.* (Melbourne).—**Patchouly-oil Distillation.**—You are about to commence the cultivation of patchouly for distillation in Australia, and ask us for advice on the subject. We can only reply with the well-worn formula, "Don't." At the time when our articles on patchouly cultivation were written there was a momentary scarcity of leaves and oil, but this has since been remedied, and at present the article is quite depressed enough without adding further to the snappy. Patchouly oil is a small article, and one with which the market is easily glutted. A very good oil is distilled by an English grower in the Straits Settlements, but though it has an established reputation all over the world, it can at present be bought in the London market at 1s. 3d. per oz. easily, and the best oil distilled in Europe is not worth more than 2s. per oz. We must leave it to yourself to judge whether such a price would pay you, after deducting the cost of packing, carriage, and sale expenses; but we may say that we have heard that a planter in the West Indies, who commenced the distillation of patchouly, along with other oils, a few years ago, has found that that particular article did not pay at all, and has uprooted his plants. If you are determined to go on, however, we should advise you to enter into an arrangement with a good essential-oil importer in England (several of whom advertise in this journal) for the sale of your oils here. Perhaps he may dispose of the 200 or 300 lbs. you propose to distil annually, if your brand once becomes known. France is a large consumer of the oil also. We hardly know of any essential oils of which the distilling is likely to pay a new man, unless he can find a market locally.

156/30. *Moseley.*—**Franzbranntwein.**—This is spiritus vini gallicus. The German name is simply a contraction of "Franzosen Branntwein," or French brandy—i.e., cognac.

146/48. *S. Count.*—You can **Bleach Coloured Everlasting Flowers** with recently-made dilute nitro-muriatic acid; dip them in this, then in water, and expose to sunlight.

150/74. *Barnes.*—**Liver Troubles in Cattle** are generally treated with purgatives and salines, which suffice to carry off any surplus of bile. A little calomel (10 to 20 grains) may be given along with the purgative.

150/49. *Sencer.*—(1) Formule for arsenical paste (dental) are given in THE DIARY, p. 249. (2) **Lancashire Red Bottle** :—

	Oz.
Camphor	6
Oil of origanum	6
Alkanet root	1
Methylated spirit	83

Macerate seven days, and filter.

150/7. *H. F. R.*—Thanks for yours.

150/3. *F. J. N.*—You will require to get the machines made to order by a manufacturer of such articles. They are not kept in stock by any house that we are aware of.

150/26 *Zulu.*—(1) **Cherry Tooth-paste** :—

	Oz.
Powdered alum	$\frac{1}{2}$
" orris root	$1\frac{1}{2}$
Precipitated chalk	$1\frac{1}{2}$
Cream of tartar	$1\frac{1}{2}$
Cuttlefish-bone	$1\frac{1}{2}$
Powdered cochineal	1
Glycerine	3

Mix together, and pour upon the powder 6 oz. boiling water; stir until effervescence ceases, and heat the mass until it is of a proper consistence, then add

Oil of cloves	15 drops
Oil of bitter almonds	20 "

Mix.

(2) **Area Nut Tooth-paste** :—

Chlorate of potash	30 grains
Powdered area nut	1 oz.
Glycerine	2 drachms
Oil of cassia	3 drops
Water	A sufficiency

Mix.

150/50. *X. Y. Z.*—(1) Lead and sulphur hair-wash is for restoring the colour of the hair. It has no effect in promoting the growth. Quinine does not do a bit of good. (2) Milk of sulphur is best. Two drachms is enough for an 8-oz. bottle. (3) **Perfume for Vaseline Pomade.**—The following is cheap :—

Oil of bergamot	1 oz.
Oil of lemon	$\frac{1}{2}$ "
Oil of lavender	1 drachm
Oil of cloves	$\frac{1}{2}$ "
Oil of cassia	$\frac{1}{2}$ "

Mix.

151/46. *Explosive.*—**Iodide of Nitrogen** is formed as a black powder when iodine is treated in the cold with strong solution of ammonia. As long as the powder is damp there is no danger, but when it dries it is apt to explode with great violence.

151/23. *Theta.*—**Stoke's Liniment** (acetic).—The following is sometimes given for this :—

Turpentine	3 oz.
Acetic acid	5 drachms
Rose water	$2\frac{1}{2}$ oz.
Essence of lemon	80 minims
Yolk of 1 egg.	

Mix.

A liniment also commonly sold for Stoke's is composed of chloroform, soap liniment, and hydrochlorate of morphia.

151/21. *E. Sanders.*—The **DIARY** for the present year contains advice on counter-prescribing. See also Begbie's "Medical Information and Advice" (Nelson, 2s. 6d.).

152/27. *Delta.*—There is no such oil.

152/52. *Henley in Arden.*—Your fruit is that of the Cape gooseberry (*Physalis peruviana*, L.). The plant belongs to the Solanaceae, and is a native of tropical America. The yellowish, fleshy fruits are edible, and have a very agreeable flavour when ripe; they also make an excellent preserve. The plant grows fairly well in this country, and produces its fruits during warm summers, and it is cultivated in warm countries for this purpose.

152/22. *Hydrokinone*.—You may **Blacken Brass** by two methods; first, with a varnish such as:—

Gas black	½ drachm
Methylated spirit	2 "
Spirit varnish	2 "

Mix

Or with the following solution:—

White arsenic	2 drachms
Hydrochloric acid	4 "
Sulphuric acid	1 "
Water	10 oz.

Make a solution and apply to the warmed article.

153/39.—*Wills*.—We do not think wholesale houses take the trouble to remove the odour from methylated spirit before using it for liniments. It is illegal to distil the spirit, but you may filter it through animal charcoal, which "purifies" it somewhat.

153/46. *Beacon*.—Kaolin, fuller's earth, or powdered pumice will serve to clear up the mixture of syrup and acetic acid containing surplus essential oil.

153/48. *H. A.*—Omit the ginger-root and the tincture of borage. Use 4 oz. of soluble essence of ginger, adding it to the sugar and water when cold; at the same time add the citric acid, and 1 drachm of salicylic acid; then the yeast. Work for four hours, strain, and bottle.

199/31. *Wills*.—Silver coins are not made of pure silver, but of an alloy; so that you cannot make pure nitrate of silver from them, except by a process which would swallow up all the profit.

154/60. *H. Oliver*.—**A. B. C. Liniment**.—By this we understand a mixture of equal parts of aconite and belladonna liniments and chloroform is meant.

154/54. *W. R. F.*—We should think that the black spots in the tooth-paste arise from the pumice-stone (likely to contain a little iron). Try cuttle-fish bone in place of it.

154/59. *W. R. W.*—(1) Yes, the formula is as it was communicated to us. The dose is a teaspoonful. (2) See this issue and (3) the last in replies to similar queries.

148/27. *A. B. C.*—From the small and poor specimen sent the plant would appear to be *Senecio crucifolia*, L., a close ally to the common Ragwort, which was at one time used in medicine for its bitter, aromatic properties. *S. crucifolia* probably possesses similar properties, and would consequently have no ill effects upon cattle partaking of it in their food.

Information Supplied.

Liq. Ferri Phos. Magnetic.—In reference to your answer to "Ferrum" (141/32) in this week's issue, allow me to point out that there is a magnetic sol. of phosphate of iron (Lightfoot) made by Savory & Moore. **FERRIC**. (154/10.)

D. E. O. (156/9) states that Mr. Lightfoot, of Accrington, makes the preparation; also Messrs. James Woolley, Sons & Co., Manchester. Several other correspondents also write on the subject.

Information Wanted.

[Replies to the following requests are solicited by correspondents of THE CHEMIST AND DRUGGIST.]

148/48. Maker of galvanised iron baskets to carry syphons of aerated waters.

Trade Notes

MESSRS. THOMPSON, WALTERS, HOLE & CO. (LIMITED) have purchased the goodwill of Beddome's pills and powders. This name appeared last week as Beddowe's.

MR. JOHN DAVIS, of Old Kent Road, sends us a specimen of his "Domestic Year-book for 1891," the eighth annual issue of this work. It is an almanac, with blank space for memoranda, with illustrations, and with a good many pages of household hints and such-like matter suitable for circulation by chemists.

NEW AMERICAN PERFUMES.—Hatrack & Co. (Limited) of 31 Snow Hill, E.C., are introducing into this country the perfumes manufactured by Richard D. Young, of New York. The perfumes are of great strength yet delicate in odour, and are put up in a tasteful manner. The manufacturer has a number of special odours which are likely to take well.

SALVOLINO.—We have examined a number of samples of the white and yellow "salvolino," made by the Savolino Manufacturing Company, Lime Street Square. The white is apparently made on the principle of unguentum paraffini, Ph. G. It is an ointment free from odour, and although its melting-point is somewhat high (it softens at about 50° C.) it is soft when applied to the skin. The yellow "salvolino" is of a pale amber colour. Samples which we at first received were somewhat wanting in body, but the company is now producing it with a melting-point lying between 38.5° C. and 40.5° C.

MESSRS. BURROUGHS, WELLCOME & Co. have produced, as a souvenir of the Birmingham meeting of the British Medical Association, excellent photographic prints of Kenilworth and Warwick Castles, associated with lists of their medicinal products.—It will be noticed that this firm have received the diploma of honour from the Edinburgh Exhibition for the pharmaceutical and medicinal specialities which they exhibited there. We are informed that, pending their decision as to what award should be given, a deputation of the jury was appointed to visit the firm's works at Dartford, and since then the chairman of the jury has tendered to Messrs. Burroughs, Wellcome & Co. his sincere congratulations upon the high award that the firm has received at the Edinburgh Exhibition, "which I have pleasure in stating," adds Baron de Bush, "is most thoroughly deserved."

GRIDLEY & Co. (LIMITED), of Upper North Street, Poplar, E., have sent us copies of their lists, including one "for chemists and druggists," which includes quotations for oils, soaps, petroleum jelly, disinfectants, and sundries. We have also received a number of samples of the products, and may mention sheep-dip, sanitary fluid, pinol peat, and carbolic powder as some of the articles which they supply in bulk. All the petroleum jellies which they send us we find to be good products—thus, the white is a soft, slightly granular body, having a uniform melting-point of 45° C. The "pure yellow" is of good colour and consistency, and is non-granular, its specific gravity at 50° C. being 0.851, and melting-point 40° C. The company also make a jelly for veterinary purposes, which has a higher melting-point—viz., 47° C. It is darker than the pure, and has a faint petroleum odour. Another variety is called "waterproof"; it is perfectly black, and should make a good dubbing for boots, harness, and the like. The white mineral oil made by the company we find to answer the requirements of the German Pharmacopoeia for "paraffinum liquidum." We have also examined a sample of castor oil received from the company, and of which we can report favourably. It is pale, of faint odour, and does not become pink on heating.

AMERICAN PHARMACISTS are moving to get universal interchange of State certificates in pharmacy. At present each State (where registration is required) has its own board, and many of them do not recognise the certificates of kindred boards, so that when a pharmacist goes from one State to another he may have to go through the form of examination again.

20 HIGHEST AWARDS.

Pears' Soap

Soap Makers

by Appointment to



H.R.H.

The Prince of Wales.

RETAIL PRICES.

6d.	SIZE, unscented	-	-	-	Per Dozen.	4s.
1s.	„	all shapes, Washing or Shaving				8s.
1s. 6d.	„	Ditto	ditto			12s.
2s. 6d.	„	(The Washing Tablets are perfumed with Otto of Roses)				20s.

WHOLESALE PRICES.

TRANSPARENT GLYCERINE	2s. per Box of 3 Tablets	16s.	Per dozen Boxes.
-----------------------	--------------------------	------	------------------

DISCOUNT of 20 per Cent.
On all ORDERS of NOT LESS than **£5.**

(GROSS TRADE-PRICE VALUE.)

If accompanied by Remittance,

[Lesser Quantities 15 per Cent. Discount only.]

IMPORTANT STATEMENT.

No Dealer in the Kingdom, "Wholesale or Retail," for any quantity whatever obtains more than the above 20 PER CENT. Discount.

(Signed), *A & F Pears*

71-75, NEW OXFORD STREET, LONDON, W.C.

CRESCENT



BRAND.

BICARBONATE OF SODA,

REFINED AND RECRYSTALLIZED.
PURE AND CHEAP.

ANALYSIS.

Bicarbonate of Soda	...	...	...	...	97.20
Mono Carbonate of Soda	...	...	...	...	1.90
Sulphate of Soda	...	...	...	...	trace
Chloride of Sodium	...	...	...	...	.035
Moisture	...	...	...	...	.82
Insoluble	...	...	...	...	nil

PURE ALKALI,

GUARANTEED 58 DEGREES,
EQUAL TO 98 PER CENT. OF CARBONATE OF SODA.

Most economical form of Soda for the use of Printers,
Bleachers, Dyers; Glass, Paper, and Soap Makers.

SODA CRYSTALS

OF THE FINEST QUALITY.

BRUNNER, MOND & CO., LIM.

*Manufacturers of Soda by the Ammonia Process
(Solvay's & Mond's Patents),*

NORTHWICH, CHESHIRE.

WYLEYS & CO.

MANUFACTURING CHEMISTS

AND

DRUG GRINDERS.

WAREHOUSES, LABORATORIES, AND DRUG MILLS,
COVENTRY.

COMPOUND SULPHUR PELLETS

ACCORDING TO THE FORMULA OF

SIR ALFRED B. GARROD.

One Pound contains 1,000 Pellets.

A Pound of ordinary Sulphur Lozenges will
only give 460.

*Each Pellet contains Five Grains of Pure Sulphur
and One Grain of Cream of Tartar.*

PRICE, in bulk, 2/6 per lb.; or put up in metallic
boxes (20 pellets in each), with descriptive labels,
2/- per dozen.

The above may also be had sweetened with Saccharine
at 3/- per lb.

GASTRIC ANTACID PELLETS,

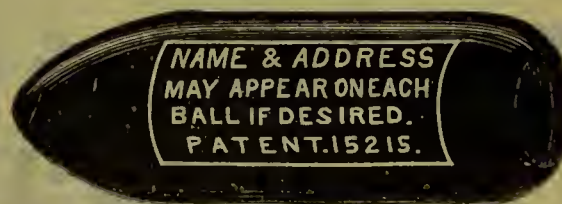
ACCORDING TO THE FORMULA OF

SIR WILLIAM ROBERTS.

PRICE, in bulk, 2/6 per lb.; or put up in metallic
boxes (20 pellets in each), with descriptive labels,
2/- per dozen.

THE DURAPLASTIC COATED HORSE BALL.

(PATENTED.)



"The obvious superiority of these balls over the old paper-wrapped articles will impress the most stolidly conservative of farmers."—*The Chemist and Druggist*, October 27, 1888.

No. 4.—Alterative Balls	...	...	24/	per gross.
" 5.—Astringent Balls	...	...	24/	"
" 12.—Condition Balls	...	...	24/	"
" 6.—Cordial Balls	...	...	24/	"
" 7.—Cough Balls	...	...	24/	"
" 16.—Cough Balls	...	...	27/	"
" 17.—Cough Balls	...	...	27/	"
" 8.—Diuretic Balls	...	...	24/	"
" 9.—Fever Balls...	...	...	24/	"
" 1.—Physic Balls	...	...	24/	"
" 2.—Physic Balls	...	...	30/	"
" 3.—Physic Balls	...	...	36/	"
" 18.—Physic Balls	...	...	42/	"
" 19.—Physic Balls	...	...	48/	"
" 15.—Stimulating Balls	...	...	24/	"
" 10.—Tonic Balls...	...	...	24/	"
" 11.—Tonic Balls...	...	...	20/	"
" 13.—Worm Balls	...	...	30/	"
" 14.—Worm Balls	...	...	60/	"

PRIVATE FORMULÆ.

WYLEYS & CO. will be glad to prepare Patent Duraplastic
Balls from private recipes.

CO., AGENTS.

W. GREEFF &

R.

R. W. GREEFF & CO.

AGENTS FOR

RIEDEL'S PHARMACEUTICAL SPECIALITIES.**SALIPYRIN-RIEDEL** $(C_{11}H_{12}N_2O C_7H_5O_3)$

Applied in Therapy where Antipyrini and Salicylic Acid are prescribed together, but has no objectionable after-effects, even if taken in doses of 6 grs. pro die.

R. W. GREEFF & CO. are also Manufacturers' Agents for the following Specialities:—

IRON REDUCED BY HYDROGEN.**ACETANILID, PUREST, BEST CRYST.****ACETIC ACID, GLACIAL & P.B.****ACETONE, PURE, 98°.****GLYCERINE, 1,260 d.d., &c.****CASTOR OIL (FRENCH).****MAGNESIA, CARB. AND CALC.****SODA HYPOSULPHITE.****SUGAR OF MILK.****ANILINE COLOURS** (CELEBRATED BERLIN BRANDS).

SOLE WHOLESALE AGENTS:

R. W. GREEFF & CO., 29 MINING LANE, **LONDON, E.C.**

NEPENTHE.**THE SAFEST AND BEST PREPARATION OF OPIUM.**

PRODUCES NEITHER HEADACHE, SICKNESS, NOR CONSTIPATION.
PREPARED EXCLUSIVELY FROM OPIUM.

Although many new hypnotics and analgesics have been recently introduced, NEPENTHE still holds its position as THE hypnotic and sedative *par excellence*. "Nepenthe" is registered under the Trade Marks Act, and is our sole property. No other preparation should be substituted when Nepenthe is ordered in a prescription.

Sent out in bottles bearing a label in white letters upon a green ground. We prepare also *Double Strength Nepenthe*, and *Glycerole of Nepenthe* (eight times the single strength) for hypodermic injection.

PRICES AND TERMS ON APPLICATION.

FERRIS & CO., WHOLESALE AND EXPORT DRUGGISTS, **BRISTOL.**

LOFTHOUSE & SALTMER,
MANUFACTURING CHEMISTS, WHOLESALE AND EXPORT **DRUG MERCHANTS,**
HULL,

Manufacturers of all Pharmaceutical Preparations on the best and most improved principles. Quotations on Application

DEALERS IN PURE CHEMICALS

For Medicinal, Photographic, and Commercial purposes.

Importers of Cod Liver, Castor, and Olive Oils; Extra Super Essence of Lemon and Bergamot; Otto de Rose, and all Essential Oils; Valerian Saffron; Vanillas; Fruit Essences; Carmine; Aniline Dyes; Bees' Wax, &c., &c.

Special Agents for Sicilian Sublimed Sulphur in 2-cwt. bags, and Rolled Sulphur in 3-cwt. casks. Most Favourable Quotations can be given on application.

ESTABLISHED 1813.

CLAY, DOD & COMPANY,

WHOLESALE AND EXPORT DRUGGISTS,

52 ST. ANNE STREET, LIVERPOOL.

Address for Telegrams—"CLAY LIVERPOOL."

Telephone No. 1192.

Mills and Laboratories—WAKEFIELD STREET.

**IMPORTERS OF ESSENTIAL OILS, OLIVE OILS, CASTOR OIL,
FINEST NORWEGIAN COD LIVER OIL.**

Manufacturers of all descriptions of

PHARMACEUTICAL PREPARATIONS, COATED TASTELESS PILLS.*Powders ground in own mills. Purity guaranteed.**Samples free on application. Special Quotation to Cash or Large Buyers. Monthly Priced List forwarded on receipt of business card***BITUMINOL, OR VASELINE SUBSTITUTE.****W. EDWARDS & SON,****157 QUEEN VICTORIA STREET, LONDON,**

WHOLESALE AND EXPORT DEALERS IN

Patent Medicines and Proprietary Articles,

ENGLISH, AMERICAN, FRENCH, &c.

SOLE AGENTS for ROCHE'S HERBAL EMBROCATION,Burchell's Anodyne Necklaces, Ford's Balsam of Horehound, Widow Welch's Pills, by Mrs. Smithers
Oxley's Essence Ginger, and the preparations of Messrs. Hudson & Son, late of the Haymarket, London.**PRICE LISTS SENT ON APPLICATION. ORDERS CAREFULLY AND PROMPTLY EXECUTED****BARRON, HARVEYS & CO.****GILTSPUR STREET, LONDON, E.C.**Beg to inform their friends and the Trade generally that, having
purchased the Business of**BARRON, SQUIRE & CO, BUSH LANE,**

and also the various Formulæ of the Special Preparations of

JAMES BASS & SONS, HATTON GARDEN,

they are prepared to execute orders for the same, and pledge themselves to supply them in all their integrity.

Specimens of these Preparations have remained in the Museum of Kew Gardens during 23 years without deterioration.

SANTI DE PASQUALE & FIGLI.
MESSINA, I.
MANUFACTORIES



LEMON. BERGAMOT.

ORANGE. MANDARINE.

W. DRYSDALE & CO.
SOLE AGENTS
8. GREECHURCH LANE. LONDON. E.C.

PRIZE MEDALS, PARIS.

PHILADELPHIA. MELBOURNE.

SALICYLIC ACID

PHYSIOLOGICALLY PURE.

MANUFACTURED BY

DR. F. VON HEYDEN'S NACHFOLGER, DRESDEN.

For Samples and Prices apply to

BURGOYNE, BURBIDGES & CO.
12 and 16 COLEMAN STREET, LONDON, E.C.

SAVARESSE'S CAPSULES. SANDAL WOOD; COPAIBA

36s. and 18s. per dozen.

The physiological peculiarity of Savaresse's Capsules is that the *organic membrane* of which they are made so resists the action of the gastric juice that they rarely dissolve in the stomach: this avoids nausea, eructations, and indigestion.

The late Mr. WM. ACTON, F.R.C.S., says:—"In many instances I have known the capsule burst in the effort of swallowing, or *dissolve as soon as it is in the stomach*. An improvement has lately been introduced, by Messrs. Evans & Lescher, by enclosing copaiba in *membrane*, thus obviating many of the objections to all gelatine capsules."

CASCARA SAGRADA, HAWLEY (in Capsules).

The nauseous taste of this drug is effectually covered by enclosing a Concentrated Fluid Extract in Gelatine.

In boxes of 20 and 100 capsules, each containing equal to 30 drops of Fluid Extract.

PRICE—8/6 per doz.; 100 caps. 35/6 per doz.

EVANS, LESCHER & WEBB,
LONDON.

LIVERPOOL:

MONTREAL: [4]

EVANS, SONS & CO. EVANS AND SONS (Lim.)

SULPHATE OF QUININE

(GOLD AND SILVER BRAND)

QUININE FACTORY AUERBACH

(DR. SEYFERTH).

Certified by Professor Fresenius, of Wiesbaden, as equal to the best preparations of other marks.

THE FACTORY SUPPLIED THE
RUSSIAN, AUSTRIAN, and DUTCH GOVERNMENTS
during last Season.

DEUTSCHE GOLD AND SILBER SCHEIDE ANSTALT

(VORMALS ROSSLER),

FRANKFORT-ON-MAINE

CYANIDE OF POTASSIUM,
IODIDE OF POTASSIUM,
BROMIDE OF POTASSIUM,
NITRATE OF SILVER,
CHLORIDE OF GOLD,
SULPHOCYANIDE OF BARIUM,

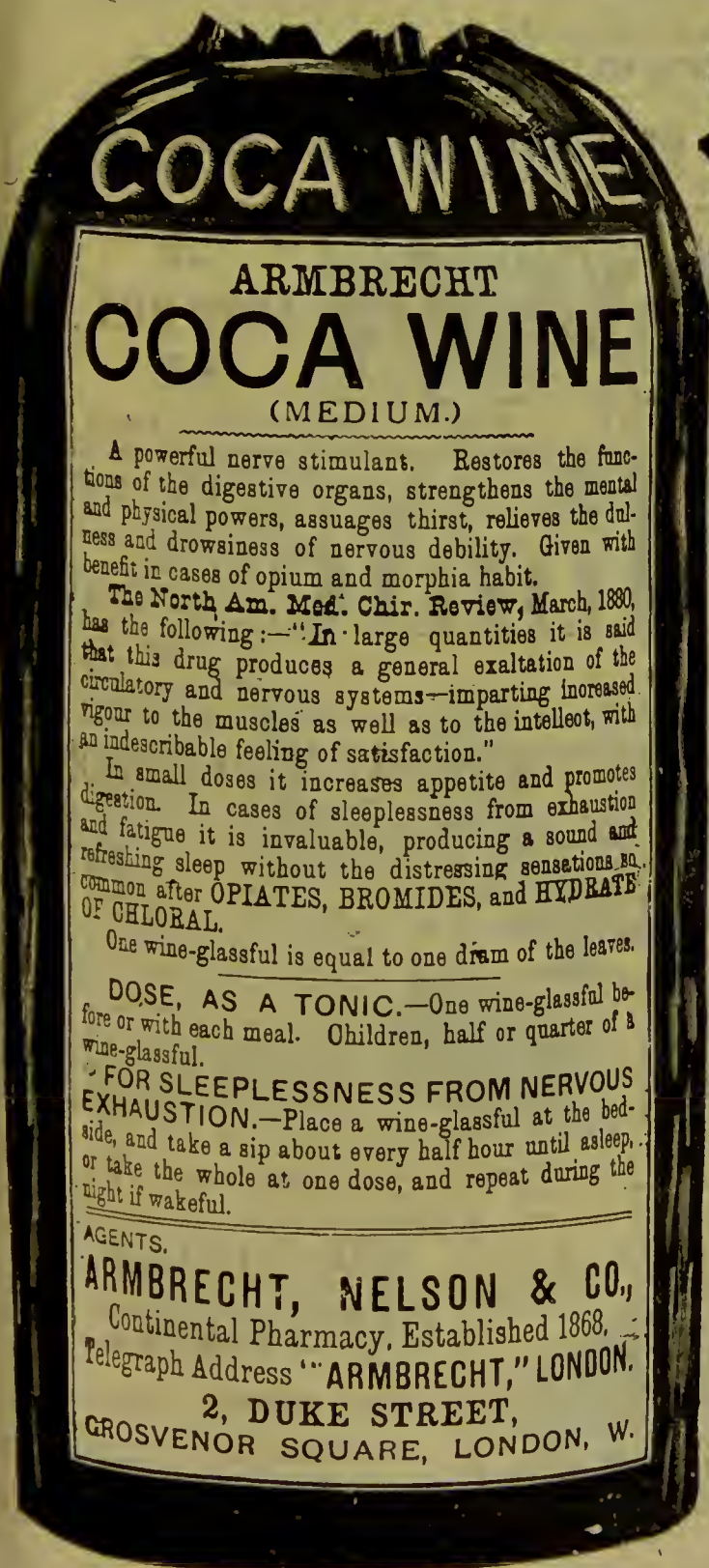
IRON Reduced by HYDROGEN,
TARTARIC ACID,
HYDROCHLORIC,
STRONTIA,
MAGNESIA, and ALL OTHER
CHEMICALS for

PHOTOGRAPHIC and PHARMACEUTICAL PURPOSES, of the
Best Quality.

Sole Agents—**OSCAR ANDREAE & CO.**

26 Great Tower Street, LONDON, E.C.

ARMBRECHT COCA WINE.



"Several preparations of Coca Wine have been placed before the public, but we unhesitatingly accord to the above the first place. Their Coca Wine is more suited to the English palate than some of the continental preparations, which are too sweet to be palatable, and which destroy their otherwise tonic and invigorating qualities by deranging the digestive system or creating nausea. The value of Coca Wine in conditions of debility is too well recognised to require comment, and we need do no more than say that after a very careful trial of Messrs. ARMBRECHT, NELSON & Co.'s Wine we can speak most highly of it as a sound and invigorating tonic, and can recommend it most unhesitatingly."—*Journal of Laryngology and Rhinology.*

COCA WINE EXTRACT.

A SUBSTITUTE FOR COCA WINE,

Or for making Coca Wine by adding five drops (or more) to Wine.

COCA LOZENGES.

[This Illustration represents the
EXACT SIZE
of the 4s. 6d. Bottle.]

Very liberal discount and nice Show
Cards to the Trade.

ARMBRECHT, NELSON & CO.

2, 3, 4 DUKE STREET, AND 3 TOM'S COURT, GROSVENOR SQUARE, LONDON

BUYERS ARE CAUTIONED TO SEE THAT THEY GET THE
GENUINE



DR. JOHN HOOPER'S PILLS,

Which may be known by the Name of the Inventor being on the Government Stamp.

Handbills and Show Cards will be sent on application to

MAY, ROBERTS & CO., 9 CLERKENWELL ROAD, LONDON, E.C.

AMERICAN BUYERS are particularly Cautioned!!

Telegraphic Address—"FEEDING BOTTLES LONDON."

All
Wholesale
Houses.

PETER MÜLLER'S

**43
SNOW HILL,
E.C.**

LONDON, CHRISTIANIA, STAMSUND, AND SYLTEFJORD.

For terms and particulars, apply to the Proprietors—GUY'S TONIC COMPANY, 4 Ludgate Circus, London, E.C. It may also be obtained from the usual Wholesale Houses.

Guy's Tonic

Guy's Tonic is sold Retail at 2s. 9d. per bottle. One size only prepared.

We are co-operating with Chemists and the trade generally, arranging satisfactory terms in return for general enterprise on our behalf.

G. B. KENT & SONS

Have been awarded the ONLY



A.D. 1777.

GOLD MEDAL



At the Paris Exhibition, 1889, for
ENGLISH BRUSHES

See Advt. pp. 189-192, *The Chemist and Druggist*,
July 26th, 1890.

EADE'S

CELEBRATED

GOUT

AND RHEUMATIC

PILLS.

THE SAFEST and MOST
EFFECTUAL CURE for

Gout,
Rheumatism,
Rheumatic Gout,
Lumbago,
Pains in the Head
Face, and Limbs, &c.

They require neither confinement nor alteration of diet, and in no case can their effect be injurious.

Prepared only by GEORGE EADE, 72 Goswell Road, London, and sold by all Chemists, in bottles, 1s. 1½d.; three in one, 2s. 9d.

SEABURY'S COMPOUND SULPHUR CANDLE

From *The Chemist and Druggist*, Dec. 22, 1888:—"A compound sulphur candle is a novelty which ought to sell freely. It offers an easy means of supplying sulphurous acid gas in apartments, to clothing, &c. It is a mass of sulphur with a wick, all enclosed in tin, and capable of being sold for 1s."



From *The Lancet*, Jan. 5, 1887:—"The idea is an excellent one, for considerable risk attends the burning of sulphur in an ordinary manner. It is, moreover, a great convenience to have a known and suitable quantity of sulphur ready for immediate use. The cubic area of a room being known, the exact number of candles required for its disinfection will at once be evident."

SOLE MANUFACTURERS—
SEABURY & JOHNSON, 46 Jewin Street, LONDON, E.C.
NEW YORK AND HAMBURG.

REGISTERED

MRS. E. FILCE'S



OINTMENT.

None genuine without bearing the registered trade mark.

SOLD IN 7½d., 1s. 1½d. and 2s. 9d. POTTS.

Sole Proprietress—Mrs. E. FILCE.

(To be had of Chemists & Druggists throughout the United Kingdom.)

Local Address—1 Theobald Road, Croydon,

N.B.!

SPECIAL ATTENTION

IS

REQUESTED

TO

ADVERTISEMENT

OF

PLASTERS

AND

WINTER REQUISITES

ON

Pages 4, 5, 6, & 7

(BOTTOM FOLIOS)

OF THIS ISSUE.

LIVERPOOL:

EVANS, SONS & CO.

LONDON:

EVANS, LESCHER & WEBB.

NEW SOUTH WALES
THE AUSTRALIAN DRUG CO., LIM.
LATE E. PROSSER & CO.,

IMPORTERS OF PATENT MEDICINES, DRUGGISTS'
 SUNDRIES, DYE GOODS,
 SURGICAL INSTRUMENTS, PERFUMERY,
 FANCY SOAPS, SPONGES.



IMPORTERS OF BRUSHWARE, CORDIAL MAKERS,
 M. CHINERY, CORKS, BOTTLES, LABELS,
 PHOTOGRAPHIC & CHEMICALS AND MATERIALS.

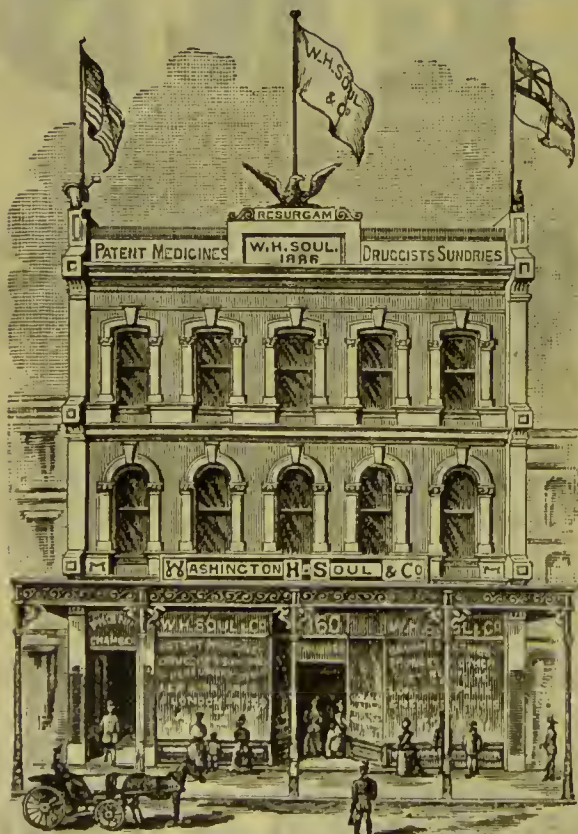
Wholesale Druggists, 19 & 21 O'Connell Street, SYDNEY.

Agencies for Patent Medicines and other Goods solicited. Travellers cover New South Wales and Queensland.

London Agents: LAUGHLAND, MACKAY & BAKER, 50 Lime Street, E.C.

NEW SOUTH WALES.

W. H. SOUL & Co.



7 DOORS FROM KING STREET.

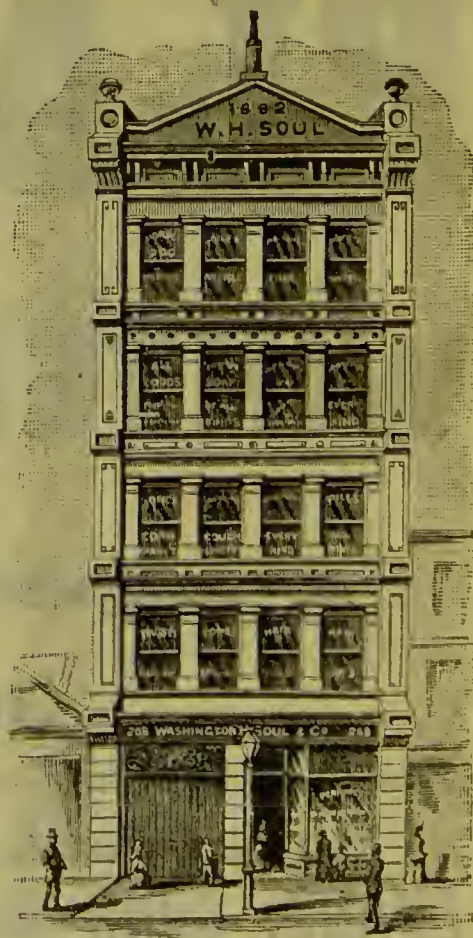
Nos. 158, 160, 162, & 268

**PITT STREET,
 SYDNEY, N.S.W.**

Will be pleased to
 fill any lines from their
 large Stock, which the
 Trade may be unable
 to obtain from their
 usual Jobbers.

TERMS CASH.

*W. H. S. & Co. can arrange
 with pushing Houses to receive
 Goods on Commission for
 prompt Sale in this Colony.*



4 DOORS FROM PARK STREET.



ESTABLISHED 1870

PROSSER, TAYLOR & CO.

(LATE BERKLEY, TAYLOR CO.),

**WHOLESALE DRUGGISTS AND IMPORTERS,
AND
MANUFACTURING CHEMISTS
BRISBANE, QUEENSLAND.**

CONTRACTORS TO THE QUEENSLAND GOVERNMENT.

Importers of Drugs, Chemicals, and Druggists' Sundries, Patent Medicines and Perfumery; Surgical Instruments, Photographic Sundries, Confectioners' and Dyers' Goods, Dental Sundries, Soda Water Machinery, Bottling Racks, Egg-shape and Lamont's Soda Water Bottles, Corks, Essences, Labels, and all Cordial Makers' Requirements.

All parts of Queensland visited at regular intervals by experienced Travellers.

Agencies solicited from Firms who are prepared to actively introduce their Manufactures into the Colony.

LONDON AGENTS—

MESSRS. LAUGHLAND, MACKAY & BAKER, 50 LIME STREET, E.C.

JULIUS LEVY,

Wholesale Druggist & Sundryman, 316 Flinders St., Melbourne, & Charlotte Place, Sydney.

AGENT FOR

HEINRICH HAENSEL — Olea aetherea sine terpeno.

E. MERCK — Alca'oids and Glucosides.

GUSTAV LOHSE — Lily of the Valley Perfumery and Superior Toilet Soaps.

ROBERT FRERES — Triple Extraits and Olive Oil.

STEVENSON & HOWELL — Special Belfast Flavour, Gum Foam, &c. &c.

W. TOOGOOD — W.-Brand of Dispensing Bottles and Chemists' Sundries.

Correspondence invited and should be addressed to Charlotte Place, Sydney. Special facilities for introducing new lines.

VICTORIA.

ROCKE, TOMPSITT & CO., WHOLESALE DRUGGISTS, MELBOURNE,

AND

119 & 120 LONDON WALL, E.C.

Samples and Quotations solicited.

Agencies undertaken on the most advantageous terms.

Wholesale Depot for Sander & Son's Pure Volatile Eucalyptus Oil (Eucalyptol), and Importers of Oil of Eucalyptus.

Wholesale Agents—Messrs. Hodgkinson, Prestons & King, 81 Bishopsgate Street Without, E.C.

FELTON, GRIMWADE & CO.,

Wholesale Druggists and Manufacturing Chemists,
MELBOURNE, VICTORIA.

LONDON AGENTS:—

Messrs. GRIMWADE, RIDLEY & CO., Mildmay Chambers, 82 Bishopsgate Street

Wholesale Agents for Bosisto's Genuine Oil of Eucalyptus.

B. G. LENNON & CO., PORT ELIZABETH
& EAST LONDON,

LENNON & TEBB, CAPE TOWN,

Wholesale Druggists & Druggists' Sundriesmen

LONDON OFFICE: B. G. LENNON & CO., 14 BUNHILL ROW, E.C.

AGENCIES UNDERTAKEN.

NEW ZEALAND.

KEMPTHORNE, PROSSER & CO.,
NEW ZEALAND DRUG COMPANY, LIMITED,
 Wholesale Druggists,
 MANUFACTURING CHEMISTS, AND COMMISSION MERCHANTS,
 Head Office and Factory, DUNEDIN.

BRANCH HOUSES:

High Street, CHRISTCHURCH,
 Hunter Street, WELLINGTON,
 Shortland Street, AUCKLAND,
Patent and Proprietary Medicines Agency.



NEW ZEALAND.

London Agents—

Messrs. GRIMWADE, RIDLEY & Co., 82 Bishopsgate Street.

INDIA.

PEAKE, ALLEN & CO.
 CHEMISTS, DRUGGISTS,
 AND
 GENERAL MERCHANTS,
 LUCKNOW, OUDH, INDIA,

Possess exceptional facilities for the
 introduction of NEW SPECIALITIES
 Patent Medicines, Druggists' Sundries,
 Perfumery, &c.

PURE
CARBONATE OF LITHIA.

and all other Lithia Salts.

MERCURIALS

Calomel, Corrosive Sublimate, Oxides, &c.

IODOFORM

Chloral, Terpene, Osmic Acid, Tannin, Tartar Emetic
 LIQUID CHLORIDE OF METHYL, for the treatment
 of Rheumatism, Neuralgia, &c.

GRAND PRIX, PARIS EXHIBITION, 1889.

Wholesale from FUERST BROS., ^{17 Philip Lane,} London, E.C.Sole Agents for BILLAULT, Rue Sorbonne, PARIS.
N.B.—Stock of the above kept in London.

UNITED STATES.

B. KEITH & CO.,
 MANUFACTURERS OF
**PURE CONCENTRATED
 MEDICINES.**

CONCENTRATED TINCTURES, ETC.

We make a full line of RESINOIDS, such
 as PODOPHYLLIN, LEPTANDRIN, EUONY-
 MIN, IRISIN, HYDRASTIN, &c., ALL PURE.

So-called Concentrations are in the market, called by the same name as
 manufactures, that are made by triturating extracts etc., with sugar
 of milk, powdered root, etc

WHAT ARE CONCENTRATED TINCTURES?

They are not made from the crude material, but by dissolving the
 active principles in Alcohol in definite proportions, and
 invariably represent a uniform amount of therapeutic power.

Send for printed matter on CON. TINCT. AVENA SATIVA in the
 Morphia or Opium Habit, and certificates from different members of the
 Medical Profession, sitting cases under their charge, treated by it; also
 REVISED AND ENLARGED MANUAL; also Price Lists, to

B. KEITH & CO.,
 75 WILLIAM STREET NEW YORK, U.S.A.

DEUTSCHMANN & WORONIECKI, LONDON AND HAMBURG.

CHEAPEST HOUSE IN THE TRADE FOR

GLUCOSE, DEXTRINE, FARINA, CARAMEL PATENT GUM & GLUE.

LONDON BRANCH:—101 LEADENHALL STREET, E.C.

MENTHOL

Our Extra Steam Refined Oil is treble distilled and twice rectified by steam, by an entirely new process and in apparatus of our own invention, by which all these polymeric products

Our Extra Steam Refined quality is in firm, hard, dry, and snowy-white crystals, entirely free from oily contamination, and therefore of the highest melting point. As the original and largest manufacturers in the world of the true Japan Menthol, we guarantee our brand to be absolutely pure. Beware of substitutes. For full particulars, therapeutic uses, etc., see special circulars, to be had on application.

of a tarry and resinous nature which are objected to by some consumers are extracted. It is of water-white colour, retaining its full aroma, pungency, and strength, and guaranteed absolutely pure and soluble in spirits or wine.

Yokohama,
Japan.

COCKING & CO. Established 1868.

COMMISSION MERCHANTS, WHOLESALE DRUGGISTS,
AND MANUFACTURING CHEMISTS.

OTHER SPECIALITIES:

Cod Liver, Fish and Orange Oils, Vegetable Wax and Isinglass.

Monthly Market Report and detail Circulars on application.

LONDON AGENTS—SPIES BROS. & CO., 106 Fenchurch Street.

Telegram Address—"COCKING YOKOHAMA."

CAMPBOR

This is the genuine essential oil as produced in the manufacture of the Solid Camphor of Commerce. Our brand is guaranteed to be the natural oil, and not the fictitious mixture of refuse Camphor and Turpentine generally sold. Having made a special study of its manufacture, we have succeeded in producing a colourless oil and entirely free from any smell. It is a remedy in Rheumatism, a good solvent of resins, and the most perfect article for the use of the essential-oil distiller.

BEE SWAX.

W. H. B. PURE REFINED.

In 2-lb. cakes, in cases of about 130 lbs.

" 1 "	" "	" "	130 "
" 1 1/2 "	" "	" "	110 "
" 2 "	" "	" "	110 "

" oz. cakes in 2-lb. parcels in cases of 54 lbs.

W. H. B. PURE WHITE.

In round cakes in 2-lb. parcels, or in oblong cakes, loose } in cases of 54 lbs.
In oz. cakes in 2-lb. parcels } and 56 lbs.
Plain blocks of 7 1/2 lbs. in cases of 250 lbs.

WHITE WAX.

Plain round cakes in 2-lb. parcels in cases of 72 lbs.

The purity of these goods is certified by the following eminent chemists: S. P. Sharpless, State Assayer, Boston; J. W. Taylor, Associate of the Society of Public Analysts of Eng., Montreal, P. Q.; Edward Davies, F.C.S. and T. I. C. and C., Royal Institution, LIVERPOOL, Eng.; Bernard Dyer, D.Sc., F.C.S., F.I.C., Member of the Society of Public Analysts, 17 Great Tower Street, LONDON, E.C., Eng.; Wm. T. Wenzel, Analyst and Assayer, San Francisco, Cal., and may be obtained of any of the leading Wholesale Druggists in the Northern and Midland Counties.

We will deliver our goods in 5-cwt. lots ex quay, in any city which is the Terminus of a Steamship Line throughout the Kingdom, without trouble or expense to the Buyer.

Our Goods may be obtained in single Case lots from any of the Leading Wholesale Druggists in the Northern and Midland Counties, and of

W. H. BOWDLEAR & CO., BOSTON, MASS., U.S.A.

Cable Address:] Office and Warehouse—36 CENTRAL WHARF. ("Bowdlear Boston.")

WM. RADAM'S MICROBE KILLER.

WHOLESALE WAREHOUSE,
111 OXFORD STREET,
LONDON, W.

Especially Useful in Hot
and Invigorating.
Pleasant, Refreshing,
CURES ALL BLOOD DISEASES.

PURE TARTAR EMETIC.
PURE OXIDE OF ANTIMONY.

Showing 98 per cent. of anhydrous Sb₂O₃.

This product is obtained BY A NEW PROCESS, and
is offered at VERY ADVANTAGEOUS PRICES.

POULENC FRÈRES,
92 Rue Vieille du Temple, PARIS.

Grand Prize, Universal Exhibition, Paris, 1889.

CARBOLIC SMOKE BALL

Will positively Cure Hay Fever, Catarrh, Asthma, Bronchitis, Hoarseness, Loss of Voice, Influenza, Sore Throat, Croup, Whooping Cough, Neuralgia, Throat Deafness, Coughs, & Colds.

FOR INHALATION ONLY.



FOR INHALATION ONLY.

THIS INFALLIBLE REMEDY IS USED BY

Countess of Aberdeen	Lady Borthwick	Lady Dodsworth	Lady Mordaunt
Countess of Elgin	Lady Annesley	Lady Macgregor	Lady Brewster
Countess of Home	Lady Churchill	Lady Plowden	Lady Fielden
Countess of Chichester	Lady Cavendish	Lady Hallé	Lady Marriot
Countess of Hardwicke	Lady Erskine	Lady Scanlen	The Lady Mayoress (Lady Isaacs)
Countess of Carnwath	Lady Mostyn	Lady Matheson	Mrs. S. B. Bancroft
Countess Manvers	Lady Clavering	Lady Palmer	Mrs. Bernard Beere
Countess Ferrers	Lady Eleanor Harbord	Lady Ramsey	Miss Ellen Terry
Viscountess Cranbrook	Lady Campbell of Garscube	Lady Blanche Hozier.	Mrs. W. H. Kendal
Marchioness de Sain	Lady Frances Hawke	Lady Wiseman	Lord Leitrim
Baroness de Linden	Lady Mappin	Lady Elliott Drake	Lord Rossmore
Dowager Lady Garvagh	Lady Harlech	Lady Cuninghame	Mr. Henry Irving
Lady Elizabeth Home	Lady Harland	Lady Grant	

Retail Price, 10/- each. Chemists can obtain from all the Patent Medicine Warehousemen.

WHOLESALE AND SHIPPING FROM—

WILCOX & CO., 239 OXFORD STREET, LONDON.

LINT.
GAMGEE TISSUE.
(PATENT ABSORBENT GAUZE AND
COTTON WOOL.)
**ABSORBENT
COTTON WOOL.**
ROLL BANDAGES.
ANTISEPTIC DRESSINGS.

ROBINSON & SONS,
COTTON SPINNERS AND MANUFACTURERS OF
SURGEONS' LINTS, COTTON WOOLS,
BANDAGES, & ANTISEPTIC DRESSINGS,
WHEAT BRIDGE MILLS,
NEAR CHESTERFIELD.



TRADE MARK.

Depot—55 Fann Street, Aldersgate Street, London.

The only make of
CHEST PROTECTORS
that will Wash
WITHOUT INJURY.



Manufacturers:
**THE
LIVERPOOL LINT CO.**
MARK ST. MILL,
LIVERPOOL.

BY ROYAL LETTERS PATENT, NO. 16,713.—DECEMBER 20, 1886.



**GODFREY'S
CHLORIDE of AMMONIUM INHALER**

Catarrhal Throat and Ear Affections, Loss of Voice,
Bronchial Asthma, and Hay Fever.

The SIMPLEST FORM of INHALER.

VERY PORTABLE. CONTAINS NO WATER.

Silver Medal, Brussels Exhibition, 1888. Yields a plentiful cloud of Neutral
Vapour, with little or no effort on the part of the patient.

SHIPPERS & LARGE BUYERS SUPPLIED ON LIBERAL TERMS.

PRICE 7s. 6d. RETAIL.

May be obtained through S. MAW, SON & THOMPSON, London.
Illustrated Prospectus, with the "History of Chloride of Ammonium as a Remedial Agent,"
free by post. **SOLE MAKERS—**

GODFREY & COOKE, 30 Conduit Street, **LONDON, W.**
Bond Street.



FRANK WOOD

(From W. WOOD & SON, MANCHESTER).

42 BELVOIR STREET, LEICESTER.

Single Trusses	15/- per doz.	Elastic Gum Catheters (Best) ...	9/- per doz.
Double „	30/- „	Catheters à Boule	15/- „
Watch-spring Pessaries	17/- „	Indiarubber Catheters	15/- „
Vulcanite Ring „	11/- „	Cotton Suspenders	10/- „
Hodge's Vulcanite „	9/- „	Cotton Elastic Stockings	2/9 each.
„ Indiarubber Pessaries	11/- „	Silk „ „	3/9 „
Zwanke's Vulcanite „	2/9 each.	Clinical Thermometers	2/4 „
Elastic Gum Catheters	7/- per doz.		

THESE PRICES ARE FOR CASH WITH ORDER, POSTAGE EXTRA.



TENTH SEASON.



MONROE'S ELECTRIC SOLES

AYRTON & SAUNDERS will feel obliged if their friends who keep above will kindly go through their stock and send on their orders as early as possible, as last season considerable delay was caused by orders coming in at the last moment. Chemists who have not yet gone in for them will really find it worth while to do so.

THEY SELL FREELY

GIVE EVERY SATISFACTION

AND YIELD A GOOD MARGIN.

It is wonderful the quantity some of our friends get through in the season, merely by putting one box in the window, and another on the counter, and, what is most important, they don't impede the sale of any other line.

We shall be glad to send a sample dozen pairs post free for 4s, and we are quite sure any Chemist introducing them will be delighted with the result.

They are packed in—

- 1 dozen Handsomely Labelled, Card Outers.
 - 3 „ Glass Top Counter Cases.
 - 12 „ Wood Stock Outers.
- Price 4/- dozen.

Can be obtained from Wholesale Houses in EDINBORO', GLASGOW, NEWCASTLE, DUBLIN, BELFAST, and EDWARDS & SON, Queen Victoria Street, LONDON, or direct from

AYRTON & SAUNDERS
LIVERPOOL.

Postal Address—

Telephone—No. 423.

Telegraphic Address—

AYRTON & SAUNDERS, LIVERPOOL.

“SUNDRIES,” LIVERPOOL.

'NOT TO KNOW THESE ARGUES ONESELF UNKNOWN.'

WARRICK

Real Heliotropes



BROTHERS'



Real Roses

18 Old Swan Lane,

LONDON, E.C.



Real Violets

* DELICIOUS + CACHOUS. *

3/- per lb., Splendidly Labelled.

4/- per dozen boxes, Gold Embossed on Calf.

FLOOR WAX

(AMERICAN),

For Halls, Ball-Rooms, &c.; does not soil the garments; easily and quickly applied. Put up in 1-lb. packages, price 2/- per lb.

FOR SALE IN ENGLAND BY

WYLEYS & CO., COVENTRY.

DR. JOHN FRANCIS CHURCHILL'S INHALANT



"SPIRONE"

TRADE MARK.

FOR THE TREATMENT AND CURE OF ALL

DISEASES OF THE LUNGS, WINDPIPE, NOSE, AND THROAT,

Claims to be a Specific for all Congestive and Inflammatory conditions of the Respiratory Apparatus, and will be found efficacious in

COUGHS AND COLDS, ASTHMA, BRONCHITIS,

Inflammation and Congestion of the Lungs, Pneumonia, Pleurisy, Whooping Cough, Croup, Diphtheria, Pharyngitis, Laryngitis, Catarrh, Sore Throat, Quinsy, Enlarged Tonsils, Hoarseness, Loss of Voice, Colds in the Head, Hay Fever, and all other Complaints of the Respiratory Organs.

PREPARED ONLY BY THE INVENTOR.

None Genuine except such as bears the above Trade Mark "SPIRONE" and the Signature of the Inventor upon the Bottles on the Label over the Cork, and on the Wrapper,

JOHN FRANCIS CHURCHILL, M.D. (Paris),

The Discoverer of the Specific Cure for Consumption, and of the Medicinal Properties of the Hypophosphites.

Price 4s. 6d. and 11s. per Bottle.

SET OF APPARATUS FOR ADMINISTRATION, 15/. PAMPHLETS AND SHOWCARDS FREE ON APPLICATION.

THE SPIRONE COMPANY, Lim., Depot—17A Duke St., Manchester Square, LONDON, W

"AGREED AT LAST."

THE Statuette, as drawing below, is effectively produced in Terra Cotta, the likenesses of the two great political leaders being most striking, and their expression clearly shows they have at last found a topic on which no difference of opinion can exist, viz., that "Hockin's Acme Cones are the best."

We shall present this striking group, which is 18 inches high, with all first orders for £2 10s. worth of our

"ACME" BRAND PURE MENTHOL CONES

(not more than £1 in value to be taken in 1d., 2d., and 3d. Cones.)

W
A
R
R
A
N
T
E
D

NEW PATTERNS, SPECIALLY SALEABLE.

No.

*217F. Glass Show Bottle, with foot, as fig. 88, 1/8 per doz.

*217A. Glass Show Bottle, with foot, as fig. 161, 3/- per doz.

*214A. Glass Show Bottle, with foot, as fig. 161. This has a very large Cone. 4/3 per doz.

220. Cone Shape, as fig. 203 each in slide box, 1 doz. in Outer, extra size, 4/3 per doz.

*221. Large Flat Draughtsman, very large Cone (120 grains), 4/9 per doz.

222. Elegantly cut Show Glass Bottles, as fig. 222, 3 cuttings, 9/- per doz.

224. Enamelled Tin Box, with Printing on box, 30 gr. Cone, 1/6 per doz.



1d. CONES.

No.

219. Willow Boxes, bottle shape, 3 doz. on card, 6/- gross.

219r. Willow Boxes, Barrel shape, 3 doz. on card, 6/- gross.

219A. Willow Boxes, Acorn shape, 3 doz. on card, 6/- gross.

2d. CONES.

202s. Polished Willow Boxes, bullet shape, 12/- gross.

201s. Polished Willow Boxes, barrel shape, 12/- gross.

206s. Polished Willow Boxes, cone shape, 12/- gross. 2 doz. on card.

3d. CONES.

207s. Polished Willow Boxes, Draughtsman shape, 18/- gross.

P
U
R
E
M
E
N
T
H
O
L

We only quote the most saleable patterns here. Detail of all shapes on application.

We have been informed that a report is being circulated that our Menthol is adulterated, and we will gladly present anyone with a cheque for £10 who will give us evidence that will enable us to proceed against the perpetrator of this false statement.

HOCKIN, WILSON & CO.

13 to 16 NEW INN YARD, 186a TOTTENHAM COURT ROAD, LONDON, W.

CATALOGUE OF SUNDRIES AND SPECIALTIES FORWARDED ON RECEIPT OF BUSINESS CARD.

R C TREATT

Dunster House Mincing Lane
LONDON

IMPORTER OF

Musk Civet Ambergris Attar - of - Rose

ESSENTIAL OILS



Wholesale
and
Export
only.

APPLICATION.

ON

QUOTATIONS

AND

PRICE LIST

E. C. Z. A.

THE NEW SKIN SOAP,

MADE ONLY BY

BAYLEY & CO., 17 COCKSPUR ST., LONDON,

THE SOLE AND ORIGINAL MANUFACTURERS OF

"ESS. BOUQUET" PERFUME and of the Celebrated "SPERMACEI SOAP TABLET."

TURNED METAL FLASK & BOTTLE CAPS

For Spirits, Oils, Perfumes,
Salts, &c.



[2]

MANUFACTURERS:

H. G. SANDERS & SON,

Victoria Works, Victoria Gardens, Notting Hill Gate, LONDON, W.

Established 1820. Telegraphic Address - "COLLAPSIBLE LONDON."

ESCHMANN BROS. & WALSH,

Inventors and Manufacturers of the

SOFT SILK FLEXIBLE CATHETER,

GUARANTEED WITH WOVEN EYES.



To be had of all Surgical Instrument Makers
and Wholesale Houses.

Matchless for the Teeth, Gums, and Breath.

Dr. W. ZIEMER'S
most efficacious



"THE ALEXANDRA"

DENTIFRICE.

It Preserves, Beautifies and renders the Teeth perfectly White without injuring the enamel. It Strengthens the Gums. It is most Agreeable as a Mouth-wash, and Sweetens the Breath. It is Invaluable to Smokers. Prices: 1/3 size, 9; 2 size, 15; 3/6 size, 24/ per dozen.

Sole Proprietors: **B. W. ZIEMER & CO.,** 143 Cannon Street, London, E.C.

Sold by all
Wholesale Houses.



REGISTERED

RICHARD D. YOUNG'S HIGHEST CLASS AMERICAN PERFUMES.

SPECIAL ODORS.

(REGISTERED.)

AMERICAN TEA OLIVE,

BOUQUET ARABY, LILY BELLS

PRAIRIE WILD, MELAURA,

PERFECT VIOLET,

PURITAN ROSE,

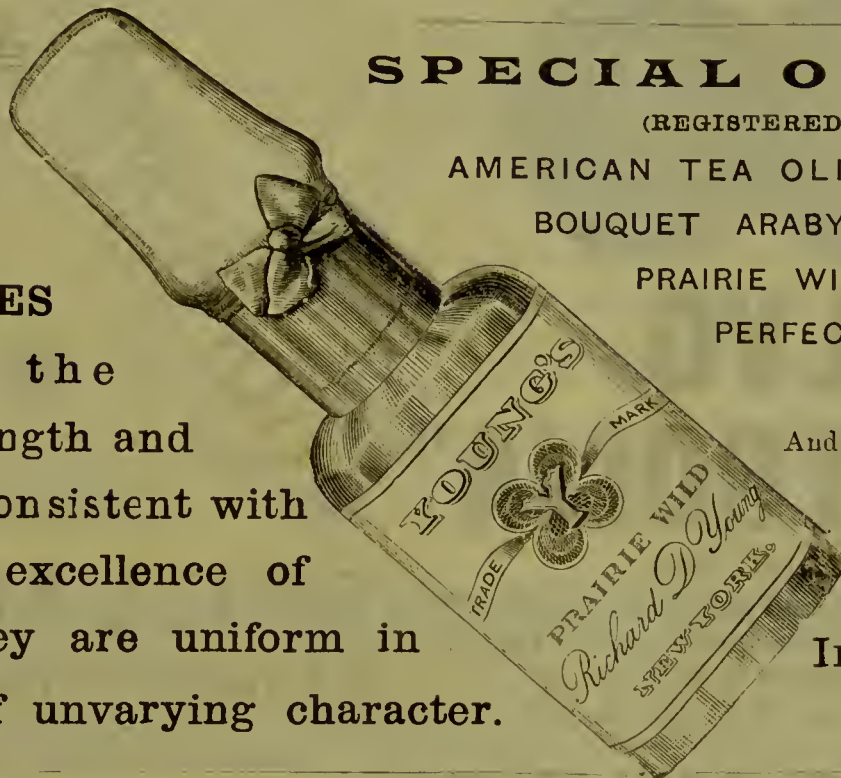
And the usual staple

assortment.

YOUNG'S

PERFUMES

combine the
greatest strength and
endurance consistent with
the highest excellence of
quality. They are uniform in
merit and of unvarying character.



In 1-oz. & 2-oz.

bottles. [2]

European Depot—31 SNOW HILL, LONDON, E.C.

WHITE AND SOUND TEETH.

JEWSBURY & BROWN'S

ORIENTAL TOOTH PASTE.



This old-established and increasingly favourite Dentifrice has been over Sixty Years before the Public. It is warranted to retain its properties and keep in good condition in any climate. The original and only genuine is manufactured solely by

JEWSBURY & BROWN, Chemists, MANCHESTER,

and is distinguishable by the Trade Mark, printed in red and green, a facsimile of which is annexed. Particular attention should be paid to this guarantee of genuineness, as numerous imitations are offered. Sold universally by Chemists and Perfumers, at 1s. 6d. and 2s. 6d.

The Trade and Shippers supplied by the leading houses in London and elsewhere. Bills and Show Cards forwarded on receipt of address cards and directions for enclosure.

AMERICAN

"CRÈME" TOOTH PASTE.

Vast is the difference between a "Crème" Tooth Paste and a Tooth Paste. Americans have used the above for 15 years. It is the only "Crème" Tooth Paste sold in England. It cleanses the Teeth, perfumes the Breath, and removes Tartar.

CHINA JARS, 2/- SILVER TUBES, 1/-

The beautiful way in which the "Crème" Tooth Paste is "got up" alone secures its sale. There is not another preparation in the United Kingdom which is turned out so well. Show Cards and Circulars with all orders of 1 Dozen upwards.

SPECIAL OFFER TO AGENTS.

With every dozen full-sized Tubes or Jars ordered in first order, we will give 1 dozen Sample Tubes or Jars. The samples are 1/4-size facsimiles. Write for Special Terms and Samples.

OF ALL WHOLESALE HOUSES, OR

THE AMERICAN TOILET COMPANY, 188 Piccadilly, LONDON, W.

PARIS EXHIBITION, 1889.
PRIZE MEDAL AWARDED TO



"SALVO PETROLIA"

(VASELINE).

Absolutely Genuine Paraffinum Molle of the very Purest Form, and we claim that it is superior to Vaseline.

Packed in Tins, 1, 4, 10, 14, 28, 56, and 112 lbs.

"OLEUM DEELINÆ"

(REGISTERED).

Universally adopted by the Medical Profession
FOR

OPHTHALMIA, SCURVY, RINGWORM,
ECZEMA, SKIN DISEASES,

FOR

EXTERNAL & INTERNAL IRRITATION
OF EVERY KIND.

PACKED IN CASES—

One Doz. 1s. 6d. Bottles; One Doz. 2s. 6d. Bottles
or half of each.

TESTIMONIALS MAY BE HAD UPON APPLICATION.

"EDIBLE SALVO PETROLIA"

For Public Speakers, Actors, & Singers.
1s. 6d. per Tube.

The above are Manufactured Solely by the Proprietors,

THE DEE OIL COMPANY, LIMITED.

Works—SALTNEY, CHESTER.

OFFICES:

LONDON — 38 LEADENHALL ST., E.C.

Liverpool, Dublin, Manchester, Glasgow, Hull, Cardiff,
Bristol, Belfast, Barrow-in-Furness, Nottingham,
Paris, Hamburg, &c.

H. P. TRUEFITT'S SPECIALITIES FOR THE HAIR.

Floral Extract, 3/6, 5/-,
10/6, 21/-

Egg Julep, 2/-, 4/-

CONCENTRATED

Egg Julep, 2/6,

5/-, 10/6.

Golden Fluid,

10/6, 21/-.

EUXURON,

1/6.

&c.

Stimulating Lotion, 5/-
10/6.

Astringent and Tonic

Lotion, 5/-, 10/6.

Quinine and Arnica

Hair Wash, 3/6,

5/-, 10/6, 21/-.

Arnica Wash

3/6, 5/-,

10/6.

&c.

EUCHRISMA.
Combines in one clear Fluid every valuable
Component both of a Hair Grease and Wash,
3/6, 5/-, 10/6, 21/-.



An elegant Preparation for
the Hair and Beard.
Price 2/6, 3/6, 5/-, 10/6, 21/-.

EAU RACINE.
For renewing the original colour of Grey Hair;
superior to all other Restorers, being perfectly
simple in its Components. Price 5/-.

BRILLANTINE.

H. P. TRUEFITT'S TONIC TOOTH BRUSH

(BY ROYAL LETTERS PATENT.)

PRICE ONE SHILLING.

20 & 21 Burlington Arcade; 13 & 14 Old Bond St., London.

This old-established and celebrated preparation for the Teeth is
attractively put up in the form of Liquid, Powder, and Paste, is now
being largely advertised to the public.



THE GENUINE
EAU DE BOTOT
IS THE ONLY DENTIFRICE APPROVED
By the Academy of Medicine of Paris.

	Size	Size	Size
EAU de BOTOT	1/6, 11/9;	2/6, 20/;	5/; 32/9 doz
POWDER	1/;	8/6; 2/6, 17/ doz.	
PASTE	1/;	8/6; 2/6, 17/ "	

Of all Wholesale Houses.

SAMPLE BOXES,
Containing
Powder, Paste, & Liquid,
per 8/- doz.

N.B.—See each Article
has the Signature—

H. P. Truefitt

Trade Mark.



Registered.

THE
ASSOCIATION for the SUPPLY of PURE VACCINE LYMPH,
12 Pall Mall East, London, S.W.
SOLE AGENTS FOR DR. WARLWORTH'S CALF VACCINE.

Tubes, 2s. each; Half Tubes, 1s. each. Pomade in vials, 5s.
HUMAN VACCINE, from healthy children only, microscopically examined and
source quoted. Tubes, two-thirds full, 1s. 6d. each; Tubes one-third full and Lan-
cet-charged points, 1s. each; Pin-points, 1s. 1d. each. Eighteen charged Small
Points, 5s. Tubes, two-thirds full (same as those mentioned above, but without
source), in quantities for export, 2s. per 100 Tubes. Pin-points uncharged, 1s. per
dozen. Vaccine Ejectors, 1s. 3d. each, including postage. Vaccinations by appoint-
ment. P.O.O.'s (including postage, and crossed London and Westminster Bank)
with orders, payable to EDWARD DARKE Secretary.

Office hours, 10 to 4. Saturdays 10 to 1.

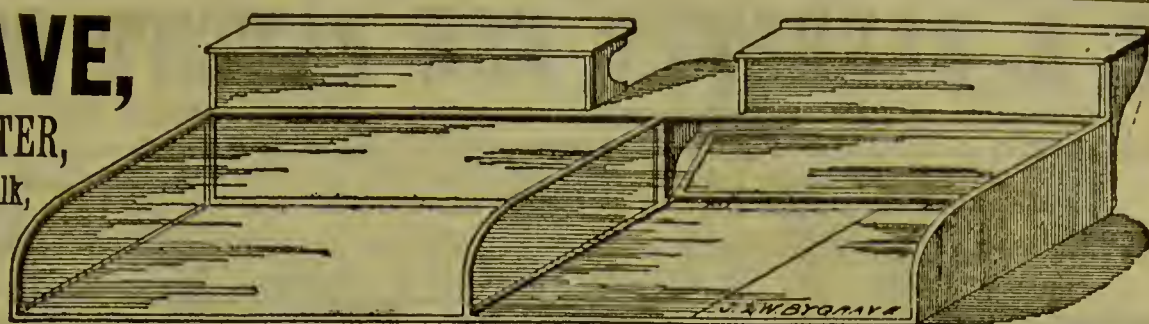
BYGRAVE,

SHOP FITTER,

111 Shepherdess Walk,

CITY ROAD,

LONDON, N.



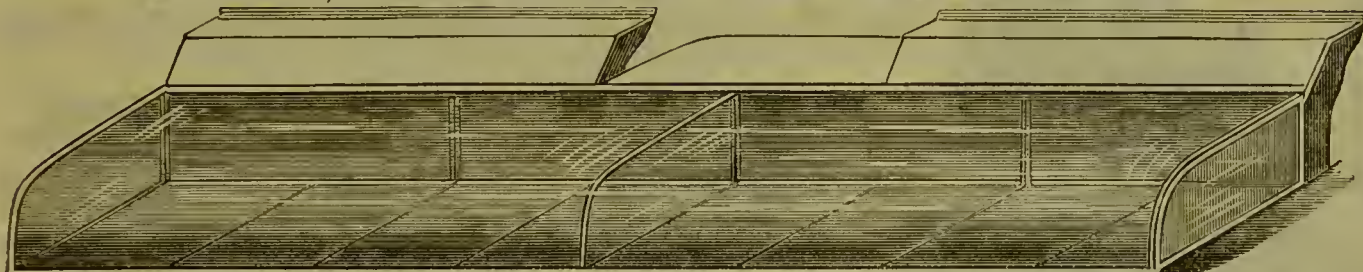
Bent-top plate-glass Counter Showcase, in French polished mahogany, or ebonized, with two upright mirror plate-glass fronted shelves, and table in centre for serving over, and mahogany falls at back lined with mirror plate glass, inside fitted with crimson velvet trays—if 5 ft. long, 18 in. wide, 8 in. high (total height 13 in.), £5 10s.; 5 per cent. off for cash.

ELKANAH NATALI

(Established 20 Years),

SHOW CASE MAKER & SHOP FITTER

MAKE MY OWN, AND WORK GUARANTEED. HUNDREDS OF TESTIMONIALS AND REFERENCES.

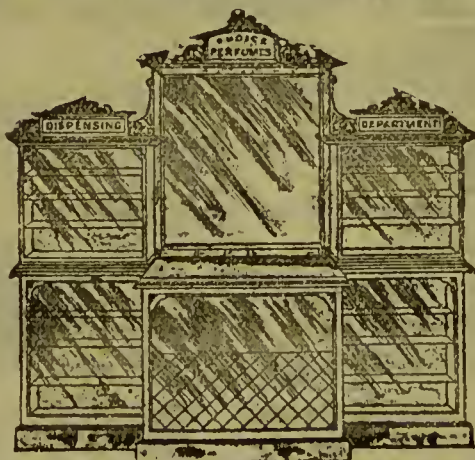


207 Old Street (Shoreditch End), LONDON. Workshops—Henson Street, E.C. (Only Addresses.)
No connection with any other house of the same name. Please address in full.

“THE CHEMIST” DISPENSING COUNTER.

6 feet long by 2 feet wide .. £24
If the Dispensing Screen only, £12

This handsome Dispensing Counter is manufactured in Spanish mahogany, and of the best workmanship, so that it will stand any climate. The counter has a solid mahogany top, and plate-glass case front. The centre part fitted to take sponge. A mahogany screen on top, consisting of two plate-glass cases, with shelves inside, and large plate-glass mirror in the centre, and three glass tablets with gold writing in ornamental mahogany carved work. The back of screen fitted with small shelves and a glass poison cupboard. The inside of counter fitted with strong counter drawers, label and cork drawer, open shelves, &c.

**NOTICE TO THE TRADE**

In consequence of inferior Second-hand Goods being sold for our make, we have found it necessary to protect our reputation for best work with a Trade Mark, as above, and unless goods are so stamped we cannot be answerable.

BOWLING & GOVIER

Manufacturers of High-class Shop Fittings,
GUN ST., BRUSHFIELD ST.
BISHOPSGATE, E.C.

ESTABLISHED 1830.

S. HOWLETT,
MEDICAL AND
GENERAL SHOP FITTER,
Shop-Front Builder and Show-Case Maker.

EXPORT ORDERS CAREFULLY PACKED AND SHIPPED.



SHOPS FITTED by Contract, in Town or Country, with every requisite, on the most improved principles, and at lowest prices.

NUMEROUS REFERENCES may be obtained of Leading Chemists in all parts of the Kingdom.



A LARGE STOCK of New and Second-hand Fittings and Cases to be sold very CHEAP.

CABINET FITTER to the Pharmaceutical Society of Great Britain.

PLANS and ESTIMATES SUPPLIED.

Manufactory and Showrooms—4 Lindley St., Stanley St., Mile End Road, LONDON, E.

R. H. BARRETT'S NEW PATENT BOTTLE.

THE ONLY REALLY PERFECT CAPPED BOTTLE FOR VASELINE, POMADE, DRY POWDERS, &c.

PRICES (in 5-gross Lots):—Fitted with STRONG METAL CAPS, CORK-LINED, in various colours, very attractive in appearance—1 oz., 12/; 1½ oz., 13/; 2 oz., 13/6; 3 oz., 16/; 4 oz., 18/ per gross.

Fitted with best BOXWOOD CAPS—1 oz., 15/6; 1½ oz., 16/6; 2 oz., 17/6; 3 oz., 21/6; 4 oz., 24/6 per gross.

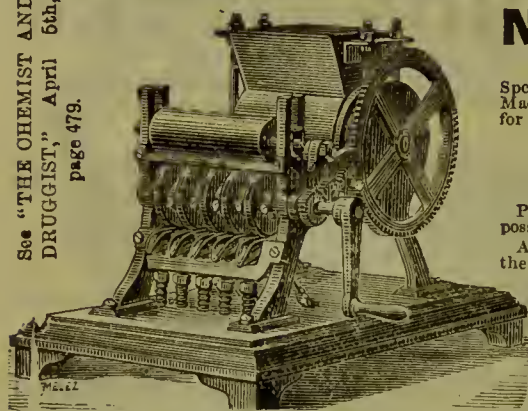
Chemists' and Perfumers' Bottles in great variety, Plain or Stoppered. Orders may be sent to the PRINCIPAL WHOLESALE HOUSES.

R. H. BARRETT,
FLINT GLASS BOTTLE WORKS,
THE OVAL, CAMBRIDGE HEATH, LONDON, E.
Telegraphic Address—"FOREFRONT LONDON." [2]

MAKERS OF ALL KINDS OF
MACHINERY for the **MANUFACTURE** of **PHARMACEUTICAL PREPARATIONS**

N. PALAU & CO., 43 Avenue du Maine, PARIS.

See "THE CHEMIST AND
DRUGGIST," April 5th,
page 479.



Special Mills or Laboratories, Mortar-mills, Sifting-machines, and Grinding-machines. Pill-making Machines, Silvering-machines, Coating-machines, Pill-printing Machines, Sugar-coating Pans. Machines for preparing and for cutting Pill-masses. Machines for manufacturing Lozenges. Machines for making Pearls and Gelatinous Capsules. Laboratory Presses, Mixing-machines, &c.

PILL COATING & PRINTING.

Pill-printing has long been considered a luxury, and remained in the hands of a Paris house, which alone possessed a proper coating process.

As a matter of fact, the coating was the unique difficulty to the extension of the process. This no longer is the case, and we are in a position to offer our clients communication of a means of coating pills. This coating serves as a protection to the substances composing the pills; also, it is absolutely soluble in the gastric juices, and a clear impression is obtained by printing.

The coating effectually protects the pills from alteration from whatever cause, in any climate or temperature. It is less costly than silver or sugar coating.

Thus, by our means, pill and granule printing has become quite practicable. It gives a superior appearance to the goods, besides which the printed inscription has the advantage of advertising the manufacturer's name, or of indicating the nature of the active principle.

DISPENSING BOTTLES & PHIALS

GREAT SAVING in the purchase of the above by taking not less than 6 gross of assorted sizes:—

	Per Gross.		Per Gross
3 & 4 oz., Plain or Graduated	7/6	1-oz. Phials	3/6
6 & 8 oz. " "	8/6	1½-oz. " "	3/9
12-oz. " "	12/-	2-oz. " "	4/3
Country packages, 1/ each, allowed for if returned.			5/3
and kinds equally low.		All other sizes	

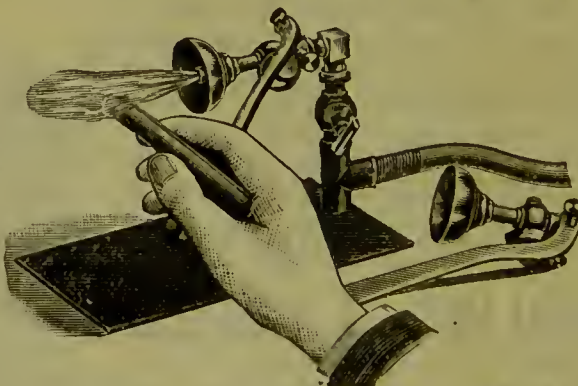
I. ISAACS & CO.

GLASS BOTTLE MANUFACTURERS.
25 Francis St, Tottenham Court Road LONDON.
159 Upper Thames Street
BANKERS: LONDON AND WESTMINSTER BANK.

ESTABLISHED UPWARDS OF 50 YEARS.

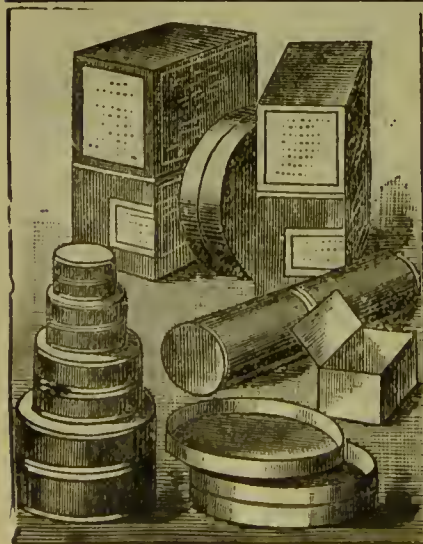
HAWES' PATENT SELF-ACTING SEALING JET

Adapted by The Apothecaries Hall, and
leading Chemists, Stationers, and
Tobaccoists.
Great saving in Gas and Labour.



QUITE NEW.

SINCLAIR, TWEEDIE & CO., 13 ELDON STREET, LONDON, E.C.



AUSTIN & CO.

Patentees and Manufacturers of FANCY CARD

ROUND, OVAL, AND SQUARE SHAPED BOXES

FOR POSTAL AND GENERAL PURPOSES.

ALSO PATENT BARREL PACKAGES WITH METAL ENDS, FOR DRY GOODS,

AND

Makers of best class of Violet Powder Boxes, and high-class goods of every description for Perfumery, &c.

8 GREVILLE ST., HATTON GARDEN, LONDON, E.C.

STEAM WORKS, 2 PRINTER'S BUILDINGS.

[2]



PHILADELPHIA, 1876.



MELBOURNE, 1880.



MELBOURNE, 1888.



SYDNEY, 1879.

KILNER BROTHERS

GLASS BOTTLE MANUFACTURERS.

No. 3^A GREAT NORTHERN GOODS STATION, KING'S CROSS, LONDON.



PARIS, 1878.

Telegraphic Address :

"BOTTLES LONDON."



LONDON, 1862.

Telephone

No. 7509.



PARIS, 1875.

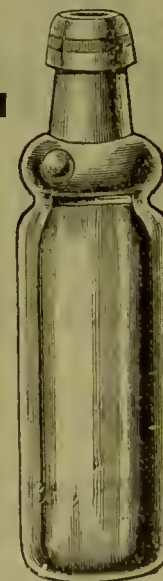


MINERAL WATER BOTTLES.

Codd's, Bulbs, and all the best stoppered kinds ; full size and splits. Also CORK Bottles in all sizes and shapes.

VAN BOXES and CASES to contain above and many other kinds of bottles.

For full particulars see Special Illustrated Catalogue of Mineral Water Bottles, Boxes, Syphons, &c., issued each Season.



DISPENSING BOTTLES.

In Green and White Flint. All the required sizes. Flat, Oval, Round, Octagon, and Direct Square. The "K" brand, being well known, is in constant and large demand.



FEEDING BOTTLES.

Fitted in a large variety of styles to suit all classes of buyers.

Careful attention is given to quality of Bottles and Rubber.

Increasing sales testify to the satisfaction given by these Feeders.

For further particulars see Illustrated Price List of Dispensing and other Bottles, which will be sent on application.

NEW CAPSULING MACHINE

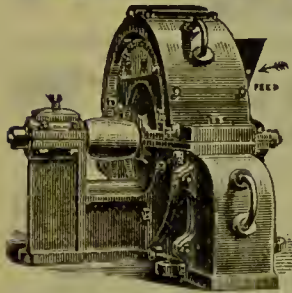
The only Machine
which leaves no crease
or pleat on the
Capsule.



Can be fixed to any
Counter.
A single pull of the lever
is sufficient
to fix the Capsule.

Patentee—**C. MELIN**, 37 Crutched Friars, LONDON, E.C.

CARTER'S DISINTEGRATORS



No 00

Will Pulverise, Granulate, or Shred almost any Mineral, Vegetable, or Animal Substance.

NEARLY 1,600 IN USE

In all parts of the World.

For Grinding Sugar, Bark, Linseed, Ginger, Pepper, Spices, Salt, &c., this Machine is invaluable
Made in 9 Sizes. Illustrated Catalogue may be obtained on application.

Samples of ANY Material will be Ground free of charge.

TELEGRAPHIC ADDRESS ... "MILLING LONDON."

J. HARRISON CARTER, 82 Mark Lane, LONDON, and 3 Rue du Louvre, PARIS.

PETROLEUM JELLY.

Equal to VASELINE and much CHEAPER.

GOLDEN, YELLOW, RED, AND WHITE.

ANSWERS ALL REQUIREMENTS OF THE B.P.

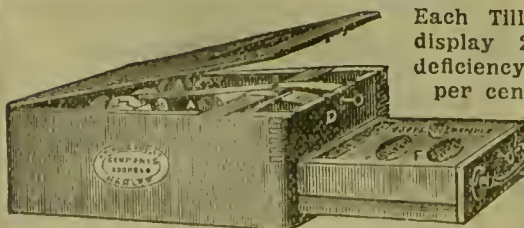
Large 1d., 2d., & 3d. Tins, in 1-gross Boxes, and in usual-size Tins & Casks.

Save 25 per cent., and write for samples and quotations from the makers,

HAMILTON & CO., LIM., WANDSWORTH, LONDON, S.W.

STOKES' PATENT CHECK TILL SYSTEM.

A SOUND INVESTMENT.



Each Till has only to
display 2d. per week
deficiency to return 15
per cent. on outlay.

30,000

Sales Checked
for

3 SHILLINGS.

Terms and full particulars on application.

G. R. STOKES & CO., Limited, Hanley, STAFF.

GARDNER'S PATENT COMBINED 'RAPID' SIFTER & MIXER



Reduces lumpy powders,
sifts and mixes faster
and makes a more perfect
blend than any Machine
in the Market.

Send for full particulars to

WM. GARDNER,
ENGINEER, &c.,
GLOUCESTER.

FOR HAND OR POWER.

Capacities, from 15 to 300 lbs. at one mixing.

WILLIAM TOOGOOD'S

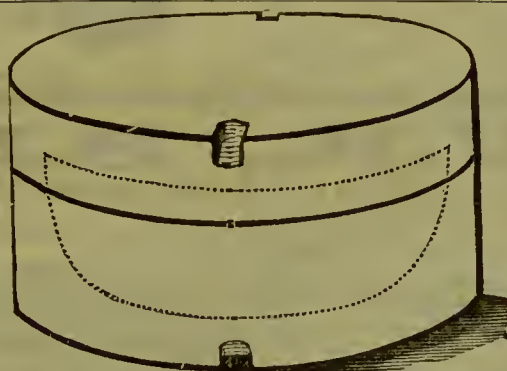
WAREHOUSE AND SHOW ROOM,

BURLINGTON BUILDINGS,

HEDDON STREET, REGENT STREET, LONDON, W.

TOOGOOD'S IMPROVED PATENT EARTHENWARE COVERED POTS

Are claimed to be the most
perfect and convenient yet offered to
the Trade.



Owing to the increasing demand
for our Patent Pots, we have in-
troduced a Special THIN Series
for Dispensing.

These Pots are beautifully
glazed and finished, and, being
very light, are specially adapted
for sending by post.

ORDINARY THICKNESS—										
1 dr.	2 dr.	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{2}$	2	3	4	6	ounces.
1/6	1/6	1/6	1/8	1/10	2/	2/3	2/10	3/6	4/6	5/6 per doz.
THIN FOR DISPENSING—										
$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{2}$	2	3	4	6	8		ounces.
1/7	1/9	2/	2/2	2/5	3/	4/	5/	6/		8/ per doz.

THE LACTOTHERME

(REGISTERED TRADE MARK) OR

INFANTS' PORTABLE MILK STOVE,

Patented in England and Abroad.

ADVANTAGES.

The Lactotherme heats milk exactly to the proper temperature at which it should be given to Infants, viz., 98 degrees Fahrenheit, this being the temperature of the milk from the mother's breast.

The Lactotherme does not cause the milk to turn sour.

The Lactotherme greatly benefits the health of Infants, as by giving food at a proper temperature, Colic, Diarrhoea, and Convulsions are guarded against.

The Lactotherme is portable, and may be as effectively used in a Railway Carriage as in the Nursery.

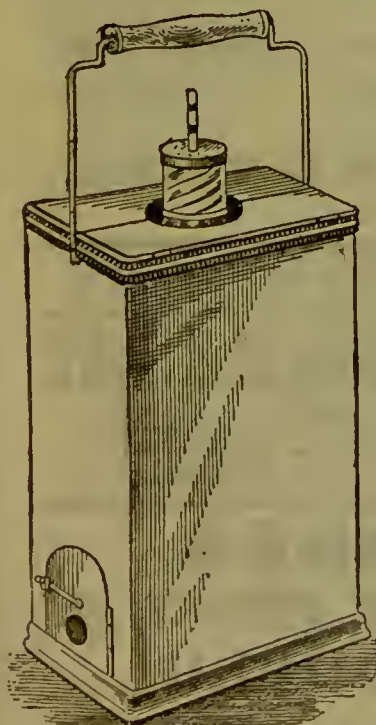
The Lactotherme will be also found a boon to Invalids for keeping warm Beef Tea, &c., during the night.

The Lactotherme is safe, cleanly, and effective, and burns without smell.

WHOLESALE PRICES.

No. 1. Japanned Iron, 6/- each. No. 2. Polished Brass, 8/6 each.
No. 3. Nickel Plated, 10/- each.

Each Apparatus is furnished complete with Thermometer, Box of Prepared Carbon, Box of Wicks, and Float.



TOOGOOD'S PATENT BRONCHITIS AIR KETTLE,

51/- per dozen.

SOLE AGENT FOR DR. LEE'S STEAM DRAFT INHALERS.

S ⁰/₅₆ **V** ⁰/₆₀ **R**
19/2 19/8

SPECIAL TERMS TO LARGE BUYERS.

CASH
WITH
ORDER.

49 CLERKENWELL
ROAD, LONDON, E.C.

THE

CHEAPEST HOUSE

FOR METHYLATED SPIRIT

TREBLY DISTILLED BY OURSELVES.

PERFECTLY PURE.

FIT FOR ANY
PURPOSE.ST. ANDREW'S
DISTILLERY,

S ⁰/₆₁ **V** ⁰/₆₄ **M**

Jars, 2-gallon, 2/6; 3-gallon, 3/; 4-gallon, 4/.
Drums, 5-gallon, 3/6; 6-gallon, 4/; 10-gallon, 6/.

S.V.R., B.P.

We wish to draw the attention of Chemists to the excellence of the spirit we supply for pharmaceutical purposes. We have devoted great care and attention to this branch and have made it a leading line.

That our efforts in this direction have been appreciated is proved by the number of *unsolicited* testimonials we have received from nearly every town in the country, of which the following is a specimen:—

GENTLEMEN,—

Please send 5 gall. 56 o.p. as before. I have pleasure in saying I have always found your spirit answer all tests, which is more than I can say of all I have had from different places, and also to be practically free from odour.

Messrs. Stephen Smith & Co.

Yours faithfully, JOSH. N. CUTTS, B.Sc., F.C.S.

In consequence of the increase in the spirit duty our prices will be—

S.V.R. 56 o.p. 19s. 3d.

Double Distilled, 56 o.p. 19s. 7d.

CASH WITH ORDER.

REDUCTIONS FOR QUANTITIES.

SPECIALITY FOR PERFUMERY.

This pure grain spirit, which has been thrice rectified and filtered through charcoal, is being largely used in making high-class Perfumes.

Price, 19/10, 56 o.p.; 20/4, 60 o.p. Cash with Order. Reductions for Quantities.

STEPHEN SMITH & CO., BOW, LONDON, E.

S. V. METH.

JONES & COMPANY,

COPPERFIELD ROAD

LONDON, E.

LARGEST MAKERS IN THE KINGDOM.

We are prepared to supply METHYLATED SPIRIT in
5-gallon quantities at Lowest Prices.

REDUCTIONS TO LARGE BUYERS.

SAMPLES FREE.

JAMES
BURROUGH, **S. V. R.**

65
o.p.60
o.p.

CALE ST., CHELSEA, S.W.

and Methyated Spirit

AT LOWEST PRICES.

WRITE FOR QUOTATIONS

MILLAR'S BRITISH WINES.

ORANGE (suitable for Quinine), GINGER, RAISIN COWSLIP, CHERRY, &c.

A. MILLAR & CO., Thomas Street, DUBLIN.

Sole Agents for London and District—H. J. ROYDANT & CO., 75 Acre Lane, Brixton, S.W.

WILEY'S CHEMICAL ESSENCE

FOR

LAMENESS IN HORSES.

Agents Wanted in every Town. Handbills, with Name and Address, supplied gratis
50 YEARS' UNBROKEN SUCCESS.

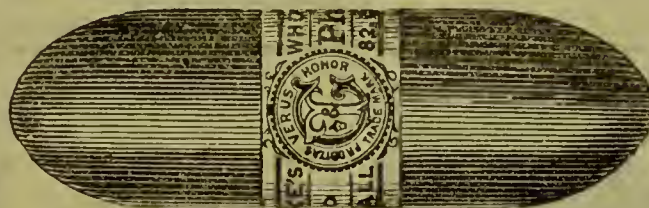
SOLE MAKER & PROPRIETOR, J. ROOKLEDGE, CHEMIST, EASINGWOLD, YORKS.
 TO BE HAD OF USUAL WHOLESALE HOUSES.

WALKER, TROKE & CO.

WHOLESALE AND EXPORT DRUGGISTS,
82 CITY ROAD, LONDON, E.C.

SOLE MAKERS OF

GABRIEL & TROKE'S
 GELATINE
 CAPSULED
 HORSEBALLS.



ELEGANT IN APPEARANCE.
 EASY IN ADMINISTRATION.
 EFFICIENT IN ACTION.

Alterative, Condition, Cordial, Cough, Diuretic, Fever, Physic, and Worm Balls.

QUOTATIONS & SAMPLES FREE ON APPLICATION.

COLTHURST & HARDING,



BALL DENOTES
 COLOUR OF PAINT.

BRISTOL—Manufactories: Phoenix Wharf and Temple Gate. Offices: Temple Gate. Telegrams: "Phoenix Bristol."

LONDON—Manufactory: Alpha Works, Millwall E. City Office: 16 Fish Street Hill, E.C. Telegrams: "Alpha Brand London."

HARD LUSTROUS ENAMEL,
 IN ALL THE ART SHADES.

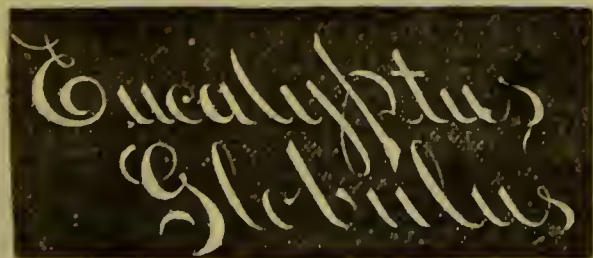
For all kinds of decoration on Wood or Iron. Dry with a surface like Porcelain. Sold in small or large Tins, or in bulk. Prices and shades on application.

WHITE LEAD, ZINC WHITE,
PAINTS & COLOURS OF ALL KINDS.

MIXED PAINTS READY FOR USE,
 In Tins, 1, 2, 4, 7, and 14 lbs. each.

HIGH-CLASS VARNISHES

Of all kinds, for Coachbuilders, Decorators, &c. OIL BOILERS, REFINERS, & MERCHANTS
 Export Orders receive special and prompt attention.



We distil pure oil of Eucalyptus GLOBULUS (which contains 66 per cent. of Eucalyptol, far in excess of any other variety) as a by-product in the manufacture of our Eucalyptus Boiler Fluid, and are therefore enabled to place it in quantities at a much lower rate than has heretofore been asked for it.

DOWNIE B. I. P. CO.

4 REDCROSS STREET, LIVERPOOL; and
 204 MARKET ST., SAN FRANCISCO.

DESTRUCTION OF RATS, &c.

STEINER'S VERMIN PASTE

REGISTERED.

Is used in
 Australia,
 New Zealand,
 West Indies,
 India,
 Cape,
 etc., etc.



Is used in
 England,
 Scotland,
 Ireland & Wales.

Is used in
 South America.

Is a Sure and Certain Destroyer of

RATS, COCKROACHES, MICE, AND BLACKBEETLES.
 IT NEVER FAILS!!!

The great strength of Steiner's Paste is not impaired in hot climates.
 Sold in 3d., 6d., and 1s. Glass Jars, and 2s. 6d. Tins.
 Wholesale and Export at the

WORKS, HENRY ST., LIMEHOUSE, LONDON.

ASK YOUR CHEMIST FOR IT.

Established 1868.

HORN & SON
OFFICES FOR BRITISH AND FOREIGN
PATENTS AND TRADE MARKS,
SOMERSET CHAMBERS, 151 STRAND, LONDON
(NEXT TO SOMERSET HOUSE).
Guide to New Patent Law and Registration gratis.

J. BEACH & SONS,
WILLOW WALK, BERMONDSEY, LONDON, S.E.
MANUFACTURERS OF
PLASTER SKINS and
WHITE SPLIT SKINS for Capping,
WHOLESALE AND FOR EXPORTATION.

ESTABLISHED 1855.
SANFORD & SON
MANUFACTURERS, SANDY, BEDS
Sole Proprietors of Sanford's Celebrated RAT POISON, without doubt the best ever introduced. Price, 6d., 1s., 2s., and 3s. per box. Also MICE POISON; cannot be excelled. In packets, 3d., 6d., and 1s. each. Liberal terms to Chemists.
Wholesale of BARCLAY & SON, SANGER & SON, NEWBERRY & SON, EDWARDS & SON, and others, London.

THE OLDEST ENGLISH & AMERICAN CHEMIST
in PARIS (founded 1808)
BOISSY late GALLOIS
2, Place Vendôme, Corner of rue St-Honoré
would undertake one or two additional
agencies for patent Medicines, Sundries, etc.
Special connexion amongst Doctors
in Paris & Provinces.

ANTECZEMA
THE NEW EMOLLIENT SKIN PAINT.
A harmless, non-poisonous, and unique remedy for
SKIN DISEASES.
A few applications will cure the most inveterate cases. It acts like magic, and is without a rival. In bottles, price 2/9. Write for terms to the Sole Agent—
R. C. LAYNG, CHEMIST, 93 FINSBURY PAVEMENT, E.C.
Wholesale of F. NEWBERRY & SON.

WATERPROOF ACCOUCHEMENT SHEETS
Manufactured for the Patentee by
ROBINSON & SONS,
Manufacturers of Antiseptic and Absorbent Lints, Cotton Wools, Gauzes,
and Roll Bandages.
WHEATBRIDGE MILLS, CHESTERFIELD
And 55 Fann Street, Aldersgate Street, London, E.C.

Fletchers'
Hydrobromates
Supplied in Original Bottles ready for Patient's use (stamped), to retail at 4/6 each; also in 1-lb. Bottles for Dispensing, by the Sole Manufacturers:—
Fletcher, Fletcher & Stevenson,
21 Mincing Lane, London, E.C.

THE
NEO-CYCLOSTYLE
DUPLICATING APPARATUS
Is invaluable to all Chemists for Printing Price Lists, Circulars, &c.
Price from 25s. to 42s. complete.
Apply for Descriptive List and Specimens of Work to the
CYCLOSTYLE CO., 79a Gracechurch St., London, E.C.

PRECIPITATED CHALK, WHITEST AND PUREST.
CHEAPEST SELLERS IN THE MARKET.
ALSO CHEMICALS, DRUGS AND OILS.
APPLY TO
AUG. LEVERMORE & CO.,
8 LIME STREET LONDON, E.C.

CHAMOIS FOR MIRRORS, SILVERWARE, DOMESTIC, UNDERWEAR, AND TOILET USE.
WHITE SPLITS PURE WHITE, SPLENDID QUALITY, FOR CAPPING PERFUMERY, &c.
WHITE PLASTER SKINS FOR CHEMISTS AND DRUGGISTS.
Basils, White Norway Doeskins, White Mock Does, Buckskins.
T. P. LEE & CO., LIM., 24 DUKE ST., BLOOMSBURY, LONDON, W.C.

HAND-PICKED GUM ARABIC.
Wholesale and Export Druggists before buying elsewhere should apply to
FREDK. FINK & CO.
10 & 11 MINCING LANE, LONDON, E.C.

Send 12 stamps for sample dozen of 3d. Sticks of White Gutta Percha Tooth Stopping.
BEST GUTTA PERCHA OR METALLIC TOOTH STOPPINGS
Are Manufactured by J. J. LAKEMAN, Dentist, LEYTONSTONE.
Special Terms to Wholesale Buyers.
Maker of the MERMAID IMPRESSION COMPOSITION for Dentists' use, 3s. per lb. post free.

JUST WHAT'S WANTED!
SHRINKING entirely PREVENTED.
Lucas "EVICTOR" Soap
Is a SPECIALITY exclusively for Washing WOOLLEN Goods THAT ARE LIABLE TO SHRINK.
Neatly wrapped, full instructions, 1/2 Gross Boxes, 18/- Gross Tablets. Of all Wholesale Houses, and C. W. LUCAS & CO., 51 Milton St., London, E.C.

GREENSILL'S ORIGINAL MONA BOUQUET.
Wholesale and Shipping Terms sent on application to the Sole Manufacturers—
GREENSILL & SON, DOUGLAS.
ESTABLISHED 1852.

S. SAINSBURY'S
From English Lavender Flowers, and most choice and delicate scents.
Lavender Water.
176 & 177 STRAND, LONDON.
Established 1839.
Wholesale and Shipping terms on application.

EMP. ADHÆSIVUM OPT.
16 INCHES WIDE.
On Glazed Calico, 2/8; on Shirting, 4/3 per doz. net cash.
JOHN QUILLIAM & CO., Plaster Works, Manchester.
Cowburn Street, [3]

**BLAIR'S
GOUT & RHEUMATIC PILLS**CURE GOUT. CURE RHEUMATISM. CURE SCIATICA.
CURE LUMBAGO. CURE NEURALGIA.

The Excruciating Pain is quickly relieved, and cured in a few days, by these celebrated Pills, well known as the Great Remedy for the above Complaints. No restraint of diet during use.

Sold by all Chemists at 1s. 11d. and 2s. 9d. per box.



One of the most valuable recent Inventions for the Preservation and Improvement of Health. Sells very readily. No Chemist should be without one in stock. Retail Price 10s. SOLE LICENSEES—

ELLIS & CO., LIM., 47 FARRINGTON ROAD, LONDON, E.C.

**JACKSON'S
ELECTRIC CORN & WART TUBES**

These tubes, being hermetically sealed, prevent any loss by evaporation or drying up of contents. Each tube is enclosed in a cardboard case, and each doz. cases mounted in a handsome box for displaying on the counter. Price 3s. 6d. dozen. Usual discounts.

Manufactured by HAROLD JACKSON, STRANGWAYS, MANCHESTER.

MARX'S INDELIBLE MARKING INK.

NO HEAT REQUIRED.

May be obtained from Messrs. Barclay & Sons (Limited), Farringdon Street, London, E.C.; Newbery & Sons, 1 and 3 King Edward Street, London, E.C.; and all Wholesale Houses, or of the Makers—

M. & E. MARX, 3 Newington Crescent, LONDON, E.C.

This Marking Ink is the Best Ink introduced to the Trade, and is sold Retail at 6d. and 1/- per bottle; also 1/6, 2/6, 3/6, 5/-, 7/6, and 10/6. Also CRIMSON MARKING INK at the above prices. Send for Sample Order.

**INDIARUBBER STAMPS**

For all purposes and in all styles.

Self-Inking Stamps, as Illustration, from 2/- each. Chemists' Prescription and Dating Stamps of all kinds, Brass Seals for Wax, Stencils, Dies, &c. Price and Pattern Sheets post free.

J. BERKLEY, 8 LIVERY ST., BIRMINGHAM.

ORANGE WINE

(VIN. AURANT., P.B.)

Specially brewed for Quinine Wine. Does not deposit, will keep good in any climate. In casks, 13 gallons to 140 gallons; small casks 3s. 9d. per gallon, carriage allowed if paid within three months. In wine-bottles (not less than 3 doz.), at 9s. per doz., bottles included. Casks and cases extra, and returnable.

Sample four stamps.

Special quotations to large buyers.

DURRANT & CO., Railway St., HERTFORD.

HYDE, NASH & CO.

16 Philpot Lane, LONDON, E.C.

SPECIALITIES—

Arabic and Varnish Gums, Glucose, Glycerine, Beeswax, Honey, Rhubarb, Insect Powder, Saffron, &c., &c.

Country orders for original packages included in public sale purchases at fractional margins.

CHAS. GREEN & CO., Tower Chambers, LONDON, E.C.

GREEN'S HYPODERMIC AND OPHTHALMIC SOLUTIONS.

Lancet—"EXCELLENT PREPARATIONS."

GREEN'S SUBLIMATE (HgCl₂) TABLETS (Acidified).

For Antiseptic use in Surgical operations, &c.

No. 1, 1 in 3,000; No. 2, 1 in 1,500, in 1 pint of water.

LIQ. SENNAE LEGUMINUM, a harmless laxative for children & pregnant women. LISTS ON APPLICATION.

CHEMISTS

WHO ADOPT

HOUSE-TO-HOUSE DISTRIBUTION

As a mode of ADVERTISING are requested to communicate with

F. RIDDIOUGH, Changeate House, KEIGHLEY.

**2/6] LOWE'S [1/6
LIVER MIXTURE.**C. LOWE, CHEMIST, SURBITON, S.W.
Through all London Houses.**BARTON'S EXTERMINATOR.**
ONE SHILLING PER BOX.

Kills and Completely Dries up Rats or Mice. Does Not Harm Dogs or Cats. No Smell from the Dead Ones.

WOLSTENCROFT & CO., 28 LUDGATE HILL, E.C.
THROUGH ALL THE WHOLESALE HOUSES.**J. MARK & CO., 76 FANN ST., LONDON, E.C.**REPRESENT GERMAN MANUFACTURERS OF
ANEROID BAROMETERS
AND
THERMOMETERS.**IN REPLY**

All purchasers of HOMOEOPATHIC Medicines and Preparations, before ordering elsewhere, should write to

WATSON & WATES

93 Leadenhall St., LONDON, E.C.,

For Price-List.

Special Line—The "ACME" AGENT'S CASE. Is made in Mahogany, Walnut, Ebony, or Oak, to correspond with Shop Fittings, and is the most unique and attractive Show Case extant. £3 3s. net. Retail value of contents, £9. No charge for Case.

PHOTOTYPE ON RECEIPT OF POST CARD.

HOW TO JUDGE SOAP

(From the Cantor Lecture, 1885.)

It is obvious that it does not follow that a soap is of high quality as a toilet soap simply because it is practically free from excess of alkali, although the converse is true—viz., that a soap is entirely unsuited for application to the skin when it contains much of that constituent, no matter how excellent it may be in other respects. In short, a toilet soap, to be of the first class from all points of view, must possess the following qualities:—

1. It must contain practically no free alkali.
2. It must be made from materials free from all trace of rankness, coarseness, or rancidity—i.e., the fatty matters and oils, &c., used in its preparation must be of best quality, carefully selected.
3. It should not be liable to discolour or brown to any great extent on keeping; soaps which have undergone this change occasionally acquire the power of injuriously affecting sensitive skins, causing blotching and irritation, even though free from excess of alkali to any marked extent.
4. To be of high quality a toilet soap cannot contain large percentages of water, for this entails the use of saline matters to “close up” and harden the mass; and these, if present in any quantity, are not likely to affect the skin injuriously.
5. If tinted or “medicated” by intermixture with non-saponaceous matters, the soap must not contain any compounds capable of causing irritation, and especially should be free from poisonous metals, and notably from mercury, lead, copper, and arsenic.
6. It must not be liable to melt away rapidly even in hot water, and must lather freely, giving a bland, emollient feel during use. Unless a soap can pass all these tests satisfactorily it cannot be regarded as a first-class article; if defective in one or more vital points it can only be assessed as second class; and if defective in many, as third class.

The highest authority on Soaps, Dr. ALDER WRIGHT, F.R.S., after careful investigation, reports as follows:—

1. INGREDIENTS PUREST. “The ingredients are of excellent quality for the manufacture of a first-class soap.”
2. PATENT PROCESSES. “The process is carried out in such a way as to render the products wholly free from all surplus uncombined alkaline matter, and THEREFORE INCAPABLE OF ACTING ON TENDER SKINS in the injurious and objectionable fashion exhibited by most kinds of ordinary soap.”
3. EXTRA CREAM. “A further amelioration is also effected by the incorporation with the soap of extra fatty matter, well calculated to soften the skin and diminish the tendency to irritation sometimes caused in very TENDER SUBJECTS BY EVEN THE PUREST OF ORDINARY SOAPS.”
4. DELICATE SCENT. “‘Vinolia’ Soap is delicately scented, and WHOLLY FREE FROM POISONOUS METALLIC COLOURING MATTERS.”

TEST YOUR SOAP.

We will supply, free on application, Tests for Soaps, with *bonâ-fide* Reports from Medical and other Scientific Journals, together with facts and figures, showing “Vinolia” Soap to be the **Purest, Safest, and Best** for Skin Irritation, Toilet, Nursery, and Bath. Recommended by Medical Men.

OF ALL CHEMISTS. “Vinolia” and “Vinolia” Powder, 1s. 9d.; “Vinolia” Soap, 6d., 8d., and 10d. Shaving Sticks, 1s.

BLONDEAU ET CIE., RYLAND ROAD, LONDON, N.W.